

Amendments

In the Specification:

Please amend paragraph [0084] as follows:

- [0084] Fig. 11 (SEQ ID NO: 147) shows the recombination region of pAd/CMV/V5-DEST.

Please amend paragraph [0085] as follows:

- [0085] Fig. 12 (SEQ ID NO: 148) shows the recombination region of pAd/PL-DEST.

Please amend paragraph [0089] as follows:

- [0089] Fig. 16 (SEQ ID NO: 126) provides the nucleotide sequence of the *OpIE2* promoter.

Please amend paragraph [0090] as follows:

- [0090] Fig. 17 (SEQ ID NO: 149) shows the recombination region of pIB/V5-His-DEST.

Please amend paragraph [0119] as follows:

- [0119] Fig. 46A (SEQ ID NO: 150) shows the recombination region of pLenti6/V5-DEST. Figure 46B (SEQ ID NO: 151) shows the recombination region of the expression clone resulting from pLenti6/UbC/V5-DEST x entry clone. Figures 46C and 46D (SEQ ID NO: 136) show[[s]] the complete sequence of the UbC promoter.

Please amend paragraph [0120] as follows:

- [0120] Fig. 47 (SEQ ID NO: 137) is a schematic representation of directional topoisomerase cloning according to the invention.

Please amend paragraph [0121] as follows:

- [0121] Fig. 48 (SEQ ID NO: 152) shows the cloning region of pLenti6/V5-D-TOPO®.

Please amend paragraph [0134] as follows:

- [0134] Figures 61A (SEQ ID NO: 153) and 61B (SEQ ID NO: 154) provide the sequences of the recombination

Please amend paragraph [0165] as follows:

- [0165] Topoisomerase recognition site. As used herein, the term "topoisomerase recognition site" or "topoisomerase site" means a defined nucleotide sequence that is recognized and bound by a site specific topoisomerase. For example, the nucleotide sequence 5'-(C/T)CCTT-3' (SEQ ID NO: 155) is a topoisomerase recognition site that is bound specifically by most poxvirus topoisomerases, including vaccinia virus DNA topoisomerase I, which then can cleave the strand after the 3'-most thymidine of the recognition site to produce a nucleotide sequence comprising 5'-(C/T)CCTT-PO₄-TOPO, *i.e.*, a complex of the topoisomerase covalently bound to the 3' phosphate through a tyrosine residue in the topoisomerase (see Shuman, *J. Biol. Chem.* 266:11372-11379, 1991; Sekiguchi and Shuman, *Nucl. Acids Res.* 22:5360-5365, 1994; each of which is incorporated herein by reference; see, also, U.S. Pat. No. 5,766,891; PCT/US95/16099; and PCT/US98/12372 also incorporated herein by reference). In comparison, the nucleotide sequence 5'-GCAACTT-3' (SEQ ID NO: 156) is the topoisomerase recognition site for type IA *E. coli* topoisomerase III.

Please amend paragraph [0213] as follows:

- [0213] Sites that may be used in the present invention include att sites. The 15 bp core region of the wildtype att site (GCTTTTTTAT ACTAA (SEQ ID NO: 1)), which is identical in all wildtype att sites, may be mutated in one or more positions. Other att sites that specifically recombine with other att sites can be constructed by altering nucleotides in and near the 7 base pair overlap region, bases 6-12 of the core region. Thus, recombination sites suitable for use in the methods, molecules, compositions, and vectors of the invention include, but are not limited to, those with insertions, deletions or substitutions of one, two, three, four, or more nucleotide bases within the 15 base pair core region (see U.S. Application Nos. 08/663,002, filed June 7, 1996 (now U.S. Patent No. 5,888,732) and 09/177,387, filed October 23, 1998, which describes the core region in further detail, and the disclosures of which are incorporated herein by reference in their entireties). Recombination sites suitable for use in the methods, compositions, and vectors of the invention also include those with insertions, deletions or substitutions of one, two, three, four, or more nucleotide bases within the 15 base pair core region that are at least 50% identical, at least 55% identical, at least 60% identical, at least 65% identical, at least 70% identical, at least 75% identical, at least 80% identical, at least 85% identical, at least 90% identical, or at least 95% identical to this 15 base pair core region.

Please amend paragraph [0215] as follows:

[0215] Analogously, the core regions in attB1, attP1, attL1 and attR1 are identical to one another, as are the core regions in attB2, attP2, attL2 and attR2. Nucleic acid molecules suitable for use with the invention also include those comprising insertions, deletions or substitutions of one, two, three, four, or more nucleotides within the seven base pair overlap region (TTTATAC, bases 6-12 in the core region, SEQ ID NO: 157). The overlap region is defined by the cut sites for the integrase protein and is the region where strand exchange takes place. Examples of such mutants, fragments, variants and derivatives include, but are not limited to, nucleic acid molecules in which (1) the thymine at position 1 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (2) the thymine at position 2 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (3) the thymine at position 3 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (4) the adenine at position 4 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or thymine; (5) the thymine at position 5 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or adenine; (6) the adenine at position 6 of the seven bp overlap region has been deleted or substituted with a guanine, cytosine, or thymine; and (7) the cytosine at position 7 of the seven bp overlap region has been deleted or substituted with a guanine, thymine, or adenine; or any combination of one or more (*e.g.*, two, three, four, five, etc.) such deletions and/or substitutions within this seven bp overlap region. The nucleotide sequences of representative seven base pair core regions are set out below.

Please amend paragraph [0216] as follows:

[0216] Altered att sites have been constructed that demonstrate that (1) substitutions made within the first three positions of the seven base pair overlap (TTTATAC, SEQ ID NO: 157) strongly affect the specificity of recombination, (2) substitutions made in the last four positions (TTTATAC, SEQ ID NO: 157) only partially alter recombination specificity, and (3) nucleotide substitutions outside of the seven bp overlap, but elsewhere within the 15 base pair core region, do not affect specificity of recombination but do influence the efficiency of recombination. Thus, nucleic acid molecules and methods of the invention include those comprising or employing one, two, three, four, five, six, eight, ten, or more recombination sites which affect

recombination specificity, particularly one or more (*e.g.*, one, two, three, four, five, six, eight, ten, twenty, thirty, forty, fifty, etc.) different recombination sites that may correspond substantially to the seven base pair overlap within the 15 base pair core region, having one or more mutations that affect recombination specificity. Particularly preferred such molecules may comprise a consensus sequence such as NNNATAC (SEQ ID NO: 158) wherein "N" refers to any nucleotide (*i.e.*, may be A, G, T/U or C). Preferably, if one of the first three nucleotides in the consensus sequence is a T/U, then at least one of the other two of the first three nucleotides is not a T/U.

Please amend paragraph [0217] as follows:

[0217] The core sequence of each att site (attB, attP, attL and attR) can be divided into functional units consisting of integrase binding sites, integrase cleavage sites and sequences that determine specificity. Specificity determinants are defined by the first three positions following the integrase top strand cleavage site. These three positions are shown with underlining in the following reference sequence: CAACTTTTTTAC AAAGTTG (SEQ ID NO: 2). Modification of these three positions (64 possible combinations) can be used to generate att sites that recombine with high specificity with other att sites having the same sequence for the first three nucleotides of the seven base pair overlap region. The possible combinations of first three nucleotides of the overlap region are shown in Table 1.

Please amend paragraph [0221] as follows:

[0221] For example, mutated att sites that may be used in the practice of the present invention include attB1 (AGCCTGCTT TTTGTACAAA CTTGT (SEQ ID NO: 3)), attP1 (TACAGGTCAC TAATACCATC TAAGTAGTTG ATTCATAGTG ACTGGATATG TTGTGTTTA CAGTATTATG TAGTCTGTT TTTATGCAA ATCTAATTAA ATATATTGAT ATTTATATCA TTTTACGTT CTCGTTCAGC TTTTTGTAC AAAGTTGGCA TTATAAAAAA GCATTGCTCA TCAATTGTT GCAACGAACA GGTCACTATC AGTCAAAATA AAATCATTAT TTG (SEQ ID NO: 4)), attL1 (CAAATAATGA TTTTATTTG ACTGATAGTG ACCTGTTCGT TGCAACAAAT TGATAAGCAA TGCTTTTTA TAATGCCAAC TTTGTACAAA AAAGCAGGCT (SEQ ID NO: 5)), and attR1 (ACAAGTTGT ACAAAAAAGC TGAACGAGAA ACGTAAAATG ATATAAAATAT CAATATATTA AATTAGATT TGCATAAAAA ACAGACTACA

TAATACTGTA AAACACAACA TATCCAGTCA CTATG (SEQ ID NO: 6). Table 3 provides the sequences of the regions surrounding the core region for the wild type att sites (attB0, P0, R0, and L0) as well as a variety of other suitable recombination sites. Those skilled in the art will appreciate that the remainder of the site may be the same as the corresponding site (B, P, L, or R) listed above.

Table 3. Nucleotide sequences of att sites.

attB0	AGCCTGCTTT TTTATACTAA CTTGAGC	(SEQ ID NO: <u>7</u>)
attP0	GTTCAAGCTTT TTTATACTAA GTTGGCA	(SEQ ID NO: <u>8</u>)
attL0	AGCCTGCTTT TTTATACTAA GTTGGCA	(SEQ ID NO: <u>9</u>)
attR0	GTTCAAGCTTT TTTATACTAA CTTGAGC	(SEQ ID NO: <u>10</u>)
attB1	AGCCTGCTTT TTTGTACAAA CTTGT	(SEQ ID NO: <u>11</u>)
attP1	GTTCAAGCTTT TTTGTACAAA GTTGGCA	(SEQ ID NO: <u>12</u>)
attL1	AGCCTGCTTT TTTGTACAAA GTTGGCA	(SEQ ID NO: <u>13</u>)
attR1	GTTCAAGCTTT TTTGTACAAA CTTGT	(SEQ ID NO: <u>14</u>)
attB2	ACCCAGCTTT CTTGTACAAA GTGGT	(SEQ ID NO: <u>15</u>)
attP2	GTTCAAGCTTT CTTGTACAAA GTTGGCA	(SEQ ID NO: <u>16</u>)
attL2	ACCCAGCTTT CTTGTACAAA GTTGGCA	(SEQ ID NO: <u>17</u>)
attR2	GTTCAAGCTTT CTTGTACAAA GTGGT	(SEQ ID NO: <u>18</u>)
attB5	CAACTTTATT ATACAAAGTT GT	(SEQ ID NO: <u>19</u>)
attP5	GTTCAACTTT ATTATACAAA GTTGGCA	(SEQ ID NO: <u>20</u>)
attL5	CAACTTTATT ATACAAAGTT GGCA	(SEQ ID NO: <u>21</u>)
attR5	GTTCAACTTT ATTATACAAA GTTGT	(SEQ ID NO: <u>22</u>)
attB11	CAACTTTCT ATACAAAGTT GT	(SEQ ID NO: <u>23</u>)
attP11	GTTCAACTTT TCTATACAAA GTTGGCA	(SEQ ID NO: <u>24</u>)
attL11	CAACTTTCT ATACAAAGTT GGCA	(SEQ ID NO: <u>25</u>)
attR11	GTTCAACTTT TCTATACAAA GTTGT	(SEQ ID NO: <u>26</u>)

Table 3. Nucleotide sequences of att sites.

attB17	CAACTTTGT ATACAAAGTT GT	(SEQ ID NO: <u>27</u>)
attP17	GTTCAACTT TGTATACAAA GTTGGCA	(SEQ ID NO: <u>28</u>)
attL17	CAACTTTGT ATACAAAGTT GGCA	(SEQ ID NO: <u>29</u>)
attR17	GTTCAACTT TGTATACAAA GTTGT	(SEQ ID NO: <u>30</u>)
attB19	CAACTTTTC GTACAAAGTT GT	(SEQ ID NO: <u>31</u>)
attP19	GTTCAACTT TTCTGTACAAA GTTGGCA	(SEQ ID NO: <u>32</u>)
attL19	CAACTTTTC GTACAAAGTT GGCA	(SEQ ID NO: <u>33</u>)
attR19	GTTCAACTT TTCTGTACAAA GTTGT	(SEQ ID NO: <u>34</u>)
attB20	CAACTTTTG GTACAAAGTT GT	(SEQ ID NO: <u>35</u>)
attP20	GTTCAACTT TTGGTACAAA GTTGGCA	(SEQ ID NO: <u>36</u>)
attL20	CAACTTTTG GTACAAAGTT GGCA	(SEQ ID NO: <u>37</u>)
attR20	GTTCAACTT TTGGTACAAA GTTGT	(SEQ ID NO: <u>38</u>)
attB21	CAACTTTTA ATACAAAGTT GT	(SEQ ID NO: <u>39</u>)
attP21	GTTCAACTT TTAATACAAA GTTGGCA	(SEQ ID NO: <u>40</u>)
attL21	CAACTTTTA ATACAAAGTT GGCA	(SEQ ID NO: <u>41</u>)
attR21	GTTCAACTT TTAATACAAA GTTGT	(SEQ ID NO: <u>42</u>)

Please amend paragraph [0224] as follows:

- [0224] The att system core integrase binding site comprises an interrupted seven base pair inverted repeat having the following nucleotide sequence:

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caactttnnnnnnnaagttg (SEQ ID NO: 43 39),

as well as variations thereof which can comprise either perfect or imperfect repeats.

Please amend paragraph [0227] as follows:

- [0227] For example, it is believed that an attB site altered to have the following nucleotide sequence:

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caactttnnnnnnnaacaag (SEQ ID NO: 44 40),

will functionally interact with a cognate attP and generate attL and attR. However, whichever of the latter two recombination sites acquires the segment containing "caag" (located on the left side of the sequence shown above) will be rendered non-functional to subsequent recombination events. The above is only one of many possible alterations in the core integrase binding sequence which can render att sites non-functional after engaging in a single recombination event. Thus, single use recombination sites may be prepared by altering nucleotides in the seven base pair inverted repeat regions which abut seven base pair overlap regions of att sites. This region is represented schematically as:

CAAC TTT [Seven Base Pair Overlap Region] AAA GTTG.

Please amend paragraph [0228] as follows:

[0228] In generating single use recombination sites, one, two, three, four or more of nucleotides of the sequences CAACTTT (SEQ ID NO: 161) or AAAGTTG (SEQ ID NO: 162) (*i.e.*, the seven base pair inverted repeat regions) may be substituted with other nucleotides or deleted altogether. These seven base pair inverted repeat regions represent complementary sequences with respect to each other. Thus, alterations may be made in either seven base pair inverted repeat region in order to generate single use recombination sites. Further, when DNA is double stranded and one seven base pair inverted repeat region is present, the other seven base pair inverted repeat region will also be present on the other strand.

Please amend paragraph [0229] as follows:

[0229] Using the sequence CAACTTT (SEQ ID NO: 161) for illustration, examples of seven base pair inverted repeat regions which can form single use recombination sites include, but are not limited to, nucleic acid molecules in which (1) the cytosine at position 1 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, adenine, or thymine; (2) the adenine at position 2 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or thymine; (3) the adenine at position 3 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or thymine; (4) the cytosine at position 4 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, adenine, or thymine; (5) the thymine at position 5 of the seven base

pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or adenine; (6) the thymine at position 6 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or adenine; and (7) the thymine at position 7 of the seven base pair inverted repeat region has been deleted or substituted with a guanine, cytosine, or adenine; or any combination of one, two, three, four, or more such deletions and/or substitutions within this seven base pair region. Representative examples of nucleotide sequences of the above described seven base pair inverted repeat regions are set out below in Table 4.

Please amend paragraph [0256] as follows:

[0256] Type IA topoisomerases include *E. coli* topoisomerase I, *E. coli* topoisomerase III, eukaryotic topoisomerase II, archeal reverse gyrase, yeast topoisomerase III, Drosophila topoisomerase III, human topoisomerase III, *Streptococcus pneumoniae* topoisomerase III, and the like, including other type IA topoisomerases (see Berger, *Biochim. Biophys. Acta* 1400:3-18, 1998; DiGate and Marians, *J. Biol. Chem.* 264:17924-17930, 1989; Kim and Wang, *J. Biol. Chem.* 267:17178-17185, 1992; Wilson, *et al.*, *J. Biol. Chem.* 275:1533-1540, 2000; Hanai, *et al.*, *Proc. Natl. Acad. Sci., USA* 93:3653-3657, 1996, U.S. Pat. No. 6,277,620, each of which is incorporated herein by reference). *E. coli* topoisomerase III, which is a type IA topoisomerase that recognizes, binds to and cleaves the sequence 5'-GCAACTT-3' (SEQ ID NO: 156), can be particularly useful in a method of the invention (Zhang, *et al.*, *J. Biol. Chem.* 270:23700-23705, 1995, which is incorporated herein by reference). A homolog, the traE protein of plasmid RP4, has been described by Li, *et al.*, *J. Biol. Chem.* 272:19582-19587 (1997) and can also be used in the practice of the invention. A DNA-protein adduct is formed with the enzyme covalently binding to the 5'-thymidine residue, with cleavage occurring between the two thymidine residues.

Please amend paragraph [0358] as follows:

[0358] Fig. 6 is a plasmid map of the pAd/CMV/V5-DEST vector, one example of a nucleic acid comprising all or a portion of a viral genome according to the present invention. The nucleotide sequence of the plasmid is provided in Table 6 (SEQ ID NO: 83). The plasmid contains the first 458 nucleotides of Ad5, including the left ITR and packaging sequence, followed the cytomegalovirus promoter (CMV) and the T7 promoter. The promoters are followed by a sequence containing selectable markers flanked by recombination sites attR1 and

attR2. Any other suitable pair of recombination sites might be employed as long as they are selected so as not to recombine with each other. After the attR2 site, the V5 epitope coding sequence is followed by stop codons in all three reading frames and the herpes virus thymidine kinase polyadenylation signal. This is followed by the nucleotides from position 3513 to the right end of the adenoviral genome including the right ITR. After the adenoviral sequences, are plasmid sequences including a plasmid origin of replication followed by the ampicillin resistance gene. The plasmid sequences are flanked by PacI restriction enzyme recognition sites. Thus, after replacement of the replaceable sequence with a sequence of interest flanked by attL1 and attL2 in a recombination reaction, an infectious viral genome can be prepared by digestion of the recombination reaction product with PacI to remove the plasmid sequences. In this particular embodiment, the viral genome is an adenoviral genome deleted in the E1 and E3 regions. The E1 function must be supplied *in trans* in order for the virus to replicate, for example, from the host cell as in 293 cells. The gene products of the E3 region are not required for replication.

Please amend paragraph [0374] as follows:

[0374] A recombinant adenoviral vector was constructed that expresses a suppressor tRNA. A map of a plasmid containing the adenoviral construct pAd-GW-TO/tRNA in which a suppressor tRNA is under the control of a tetracycline-inducible CMV promoter is shown in Fig. 7. The nucleotide sequence of pAd-GW-TO/tRNA is provided in Table 7 (SEQ ID NO: 84). An additional adenoviral construct expressing a suppressor tRNA is pAdenoTAG tRNA shown in Fig. 8. The nucleotide sequence of pAdenoTAG tRNA is provided in Table 8 (SEQ ID NO: 85). Table 9 (SEQ ID NO: 86) provides the nucleotide sequence of a Sau3A fragment that may be used to construct suppressor tRNA containing nucleic acid molecules of the invention (e.g., pAdenoTag tRNA.) A transcription terminator is located at bases 600 to 606 of the fragment, the sequence corresponding to the suppressor tRNA is located at bases 512 to 593 of the fragment, the anti-codon is located at bases 545 to 547, and the tetracycline operator sequence is located at bases 474 to 511. The suppressor tRNA produced from this sequence suppresses the amber stop codon UAG. Those skilled in the art will appreciate that it is possible to prepare suppressors for opal and ochre stop codons by mutating the bases in the anti-codon to make the anti-codon the reverse complement of the stop codon. *i.e.*, TCA for the opal stop codon and TTA for the ochre stop codon. Other anti-codons may be used, for example, those employing

other bases in the wobble position. Constructing a suitable sequence from which to produce a desired suppressor tRNA (*e.g.*, by introducing one or more point mutations in a sequence) is routine in the art.

Please amend paragraph [0378] as follows:

- [0378] A plasmid map of pAd/PL-DESTTM is provided in Figure 9 and the sequence of the plasmid is provided in Table 10 (SEQ ID NO: 87).

Please amend paragraph [0379] as follows:

- [0379] A kit may also comprise one or more control reagents. For example, a kit may comprise an adenoviral vector comprising a detectable marker that may be used as a control for transfection of cells and infection of cells. One suitable control reagent is pAd/CMV/V5-GW/*lacZ* control. A map of the pAd/CMV/V5-GW/*lacZ* plasmid is provide as Fig. 10 and the nucleotide sequence of the plasmid is provided as Table 11 (SEQ ID NO: 88).

Please amend paragraph [0384] as follows:

- [0384] The pAd/CMV/V5-DESTTM vector (36686 bp, SEQ ID NO: 83) contains the following features.

Please amend paragraph [0384] as follows:

- [0384] The pAd/PL-DESTTM vector (34864 bp, SEQ ID NO: 87) contains the following features.

Please amend paragraph [0387] as follows:

- [0387] The plasmid, pAd/CMV/V5-GW/*lacZ*, is included and may be used as a positive expression control in the mammalian cell line of choice. pAd/CMV/V5-GW/*lacZ* (Fig. 10) is a 37567 bp vector (SEQ ID NO: 88) expressing β-galactosidase, and was generated using the GATEWAYTM LR recombination reaction between an entry clone containing the *lacZ* gene and pAd/CMV/V5-DESTTM. β-galactosidase is expressed as a C-terminal V5 fusion polypeptide with a molecular weight of approximately 120 kDa.

Please amend paragraph [0394] as follows:

- [0394] pAd/CMV/V5-DESTTM is a C-terminal fusion vector; however, this vector may be used to express native polypeptides or C-terminal fusion polypeptides. A sequence of interest encoding a polypeptide of interest must contain an ATG initiation codon in the context of a Kozak consensus sequence for proper initiation of translation in mammalian cells (Kozak, M. (1987). Nucleic Acids Res. 15, 8125-8148. Kozak, M. (1991). J. Cell Biology 115, 887-903. Kozak, M. (1990). Proc. Natl. Acad. Sci. USA 87, 8301-8305.). An example of a Kozak consensus sequence is **(G/A)NNATGG** (SEQ ID NO: 159). The ATG initiation codon is underlined. Note that other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold).

Please amend paragraph [0400] as follows:

- [0400] To confirm that a sequence of interest is in the correct orientation and in frame with a fusion tag (if present), an expression construct may be sequenced. The following primer binding may be used to sequence an expression construct. Refer to the Figs. 8 and 9 for the location of the primer binding sites. The pAd/CMV/V5-DESTTM vector contains the T7 promoter/priming site 5'-TAATACGACTCACTATAGGG-3' (SEQ ID NO: 45) and the V5 (C-term) reverse priming site 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 46). The pAd/PL-DESTTM vector contains the pAd forward priming site 5'GACTTGACCGTTACGTGGAGAC-3' (SEQ ID NO: 47) and the pAd reverse priming site 5'-CCTTAAGCCACGCCACACATTTC-3' (SEQ ID NO: 48).

Please amend paragraph [0493] as follows:

- [0493] Nucleic acid molecules of the invention may be used to express a polypeptide of interest as part of a fusion polypeptide. Numerous suitable fusion partners are known to those in the art. For example a polypeptide of interest may be expressed as a fusion polypeptide containing the V5 epitope. Antibodies to detect the V5 epitope, a 14 amino acid epitope derived from the P and V proteins of the paramyxovirus, SV5 having the sequence GKPIPPLLGLDST (SEQ ID NO: 49) (Southern, J.A., *et al.*, *J. Gen. Virol.* 72:1551-1557 (1991)) are commercially available from Invitrogen Corporation, Carlsbad, CA, for example, Anti-V5 Antibody catalog no. R960-25, Anti-V5-HRP Antibody catalog no. R961-25, and catalog no. Anti-V5-AP Antibody R962-

25. A polypeptide of interest may be expressed as a fusion polypeptide with a polyhistidine sequence. Antibodies to detect a polyhistidine sequence are commercially available from Invitrogen Corporation, Carlsbad, CA. For example, Anti-His(C-term) Antibody catalog no. R930-25, Anti-His(C-term)-HRP Antibody catalog no. R931-25, and Anti-His(C-term)-AP Antibody R932-25, all of which detect a C-terminal polyhistidine (6xHis) tag and require the free carboxyl group for detection (*i.e.*, detect the sequence HHHHHH-COOH (SEQ ID NO: 165), see Lindner, P., *et al.*, *BioTechniques* 22:140-149 (1997)).

Please amend paragraph [0493] as follows:

[0493] pIB/V5-His-DEST contains the following features:

A map of pIB/V5-His-DEST is provided in Figure 15 and the nucleotide sequence of the vector is provided in Table 12 (SEQ ID NO: 89).

Please amend paragraph [0498] as follows:

[0498] Baculovirus immediate-early promoters utilize the host cell transcription machinery and do not require viral factors for activation. The *OpIE2* promoter is from the baculovirus *Orgyia pseudotsugata* multicapsid nuclear polyhedrosis virus (*OpMNPV*) and drives constitutive expression of the gene of interest in pIB/V5-His-DEST. The virus' natural host is the Douglas fir tussock moth; however, the promoter allows protein expression in *Lymantria dispar* (LD652Y), *Spodoptera frugiperda* cells (Sf9) (Hegedus, D.D., *et al.*, *Gene* 207:241-249 (1998); Pfeifer, T.A., *et al.*, *Gene* 188:183-190 (1997)), Sf21 (Invitrogen), *Trichoplusia ni* (High FiveTM, Invitrogen Corporation, Carlsbad, CA), *Drosophila* (Kc1, S2) (Hegedus, D.D., *et al.*, *Gene* 207:241-249 (1998); Pfeifer, T.A., *et al.*, *Gene* 188:183-190 (1997)) and mosquito cell lines. The *OpIE2* promoter has been sequenced and analyzed. The sequence of the promoter is provided in Figure 16 (SEQ ID NO: 126).

Please amend paragraph [0500] as follows:

[0500] The *OpIE2* promoter has been analyzed by deletion analysis using a CAT reporter in both *Lymantria dispar* (LD652Y) and *Spodoptera frugiperda* (Sf9) cells. Expression in Sf9 cells was much higher than in LD652Y cells. Deletion analysis revealed that sequence up to -275 base pairs from the start of transcription is necessary for maximal expression (Theilmann, D.A., and Stewart, S., *Virology* 187:84-96 (1992)). Additional sequence beyond -275 may broaden the

host range expression of this plasmid to other insect cell lines. In addition, an 18 bp element appears to be required for expression. This 18 bp element is repeated almost completely in three different locations and partially at six other locations. These are marked in Fig. 16 (SEQ ID NO: 126). Elimination of the three major 18 bp elements reduces expression to basal levels (Theilmann, D.A., and Stewart, S., *Virology* 187:84-96 (1992)). Primer extension experiments revealed that transcription initiates equally from either the C or the A indicated. These two transcriptional start sites are adjacent to a CAGT sequence motif that has been shown to be conserved in a number of early genes (Blissard, G.W., and Rohrmann, G.F., *Virology* 170:537-555 (1989)).

Please amend paragraph [0506] as follows:

[0506] A sequence of interest may contain a Kozak consensus sequence with an ATG initiation codon for proper initiation of translation (Kozak, M., *Nucleic Acids Res.* 15:8125-8148 (1987); Kozak, M., *J. Cell Biology* 115:887-903 (1991); Kozak, M., *Proc. Natl. Acad. Sci. USA* 87:8301-8305 (1990)). An example of a Kozak consensus sequence is provided below. Other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold). The ATG initiation codon is shown underlined.

(G/A)NNATGG (SEQ ID NO: 159)

Please amend paragraph [0511] as follows:

[0511] The recombination region of the expression clone resulting from pIB/V5-His-DEST × entry clone is shown in Fig. 17 (SEQ ID NO: 149). Shaded regions correspond to those DNA sequences transferred from the entry clone into pIB/V5-His-DEST by recombination. Non-shaded regions are derived from the pIB/V5-His-DEST vector. The underlined nucleotides flanking the shaded region correspond to bases 609 and 2292, respectively, of the pIB/V5-His-DEST vector sequence.

Please amend paragraph [0512] as follows:

[0512] To confirm that a coding sequence on the sequence of interest is in frame with the C-terminal V5 epitope and polyhistidine tag, the expression construct may be sequenced, for

example, using the OpIE2 Forward and Reverse primer sequences. Refer to Fig. 17 (SEQ ID NO: 149) for the sequence and location of the primer binding sites.

Please amend paragraph [0564] as follows:

[0564] A baculovirus genome containing a recombination cassette (DEST) bounded by attR recombination sites compatible with GATEWAY™ entry vectors (Invitrogen Corporation, Carlsbad, CA) was constructed. Two transposition cassettes were constructed one with and one without the mellitin leader sequence. A schematic representation of the cassette without the mellitin sequence is provided in Fig. 19A and the sequence is provided in Table 13 (SEQ ID NO: 90). A schematic representation of the cassette with the mellitin sequence is provided in Fig. 19B and the sequence is provided in Table 14 (SEQ ID NO: 91). The DEST cassettes contain the HSV thymidine kinase (TK) gene driven by an immediate early promoter (IE-0 promoter) and the lacZ gene driven by a late promoter (P10 promoter). The genes permit identification of non-recombinant virus using a blue white screening protocol and selection against non-recombinant viruses using ganciclovir. The cassettes also contain the V5 epitope and a 6-Histidine sequence outside the *attR2* recombination site. The sequence of the cassette contains a recognition site for the restriction enzyme *Bsu36I* (and its isoschizomer *AoiI*) that is used to linearize the viral genome.

Please amend paragraph [0572] as follows:

[0572] In some embodiments, the promoters are tightly regulated. For example, in some embodiments, the promoters are not active unless one or more transactivators are present. In some embodiments, the nucleic acid sequences that function as promoters include, but are not limited to, the AcMNPV ORF 25 promoter sequence (SEQ ID NO: 98), the AcMNPV lef 3 promoter sequence (SEQ ID NO: 99), the AcMNPV TLP promoter sequence (SEQ ID NO: 100), the AcMNPV homologous repeat 5 sequence (SEQ ID NO: 101), other baculovirus homologous repeat sequences, and the like. The nucleic acid sequences of the AcMNPV ORF 25 promoter sequence (SEQ ID NO: 98), the AcMNPV lef 3 promoter sequence (SEQ ID NO: 99), the AcMNPV TLP promoter sequence (SEQ ID NO: 100), and the AcMNPV homologous repeat 5 sequence (SEQ ID NO: 101) are provided in Table 15 (SEQ ID NOS: 98-101).

Please amend paragraph [0573] as follows:

[0573] In some embodiments, the promoters discussed above are not active unless one or more transactivators are present. One suitable transactivator is the baculoviral IE-1 protein. The IE-1 promoter sequence (SEQ ID NO: 102), coding sequence (SEQ ID NO: 103), and polypeptide sequence (SEQ ID NO: 104) are provided in Table 16 (SEQ ID NOS: 102-104). The transactivator may be provided on the same nucleic acid molecule comprising the promoter sequence or on another nucleic acid molecule (*e.g.*, plasmid, virus, host cell genome, etc.). In some embodiments, the promoter sequence operably linked to a sequence of interest may be on one nucleic acid molecule (*e.g.* a plasmid) and the transactivator sequence may be on a different nucleic acid molecule (*e.g.*, a virus such as a baculovirus). The nucleic acid molecule comprising the promoter sequence operably linked to a sequence of interest may be introduced into a host cell, for example, by transfection. The sequence of interest is not expressed or is substantially not expressed in the absence of a transactivator. In some embodiments, the host cell may be a eukaryotic cell, for example, a mammalian cell or an insect cell. The host cell comprising the nucleic acid molecule comprising the promoter sequence operably linked to a sequence of interest may be further contacted with a second nucleic acid molecule comprising the a sequence encoding the transactivator. Upon expression of the transactivator, the sequence of interest is expressed. In some embodiments, the transactivator polypeptide may be directly transfected into cells comprising the nucleic acid molecule comprising the promoter sequence operably linked to a sequence of interest. Such transactivator polypeptides may be present as native polypeptides or as fusion polypeptides, for example, as fusions with the herpesvirus VP22 polypeptide.

Please amend paragraph [0576] as follows:

[0576] The sequences provided in Table 15 (SEQ ID NOS: 98-101) are capable of functioning as conditionally activated promoters. The present invention also comprises portions of the sequences of Table 15 (SEQ ID NOS: 98-101) that function as conditionally active promoters. Such promoters may be activated by the IE-1 polypeptide. Such portions may comprise at least 50%, 60%, 70%, 80%, 90%, 95%, or more of one or more of the sequences in Table 15 (SEQ ID NOS: 98-101).

Please amend paragraph [0578] as follows:

- [0578] The O_PIE-1 promoter was replaced with long or short versions of AcMNPVgp64 or pe38 promoters, using a Topoisomerase I mediated ligation strategy (Fig. 21). The AcMNPV gp64 and pe38 promoters were amplified from cosmid #58 (comprising AcMNPV bases 99803-132856 from a cosmid library of the AcMNPV genome, Harwood *et al.* Virology. 250:113-134, 1998) with promoter-specific primers that were appended at their 5' ends with antisense TOPO sites and six additional bases (Fig. 21). pIB/V5-His was amplified with primers that included an anti-sense topoisomerase site and a six base sequence that becomes an overhang following topoisomerase binding. Each promoter (gp64s is illustrated) was amplified with similarly designed primers. Following binding, the overhangs annealed and were ligated by the enzyme. The oligonucleotide sequences are given below. The antisense topoisomerase sites are underlined.

17852 pIB Neg For	TGAGTCA <u>AAGGG</u> CTGCCGGGCTGCAGCACTG (<u>SEQ ID NO: 51</u>)
17853 pIB Neg Rev	CGGAAC <u>AAGGG</u> CATGACCAAAATCCCTAACG (<u>SEQ ID NO: 52</u>)
17849 gp64 For	GACT <u>CAAAGGG</u> CTTGCTTGTGTGTTCCATTG (<u>SEQ ID NO: 53</u>)
17850 gp64s Rev	GTTCC <u>GAAGGG</u> TTGTGTCACGTAGGCCAGATAAC (<u>SEQ ID NO: 54</u>)
17851 gp64L Rev	GTTCC <u>GAAGGG</u> AATAATCGATTAAAGGGTGTAACTC (<u>SEQ ID NO: 55</u>)
17857 pe38 For	GACT <u>CAAAGGG</u> TTTGCTTATTGGCAGGCTCTCC (<u>SEQ ID NO: 56</u>)
17858 pe38s Rev	GTTCC <u>GAAGGG</u> TATCTGTCCCCACTCAGGC (<u>SEQ ID NO: 57</u>)
17859 pe38L Rev	GTTCC <u>GAAGGG</u> AAAGTTGATGCGGCGACGGC (<u>SEQ ID NO: 58</u>)

Please amend paragraph [0598] as follows:

- [0598] The plasmid pVL1393 GST p10 stop (Fig. 34) was digested with *Bam*HI and *Nco*I. A 15 kb band was purified (removing the GST tag) to which was ligated, a double stranded oligonucleotide containing the melittin signal flanked by *Bam*H1 and *Nco*I overhangs. The ligated products were transformed into TOP10 bacteria and the correct clones verified by restriction digestion and sequencing. This plasmid (pVL1393 Mel Stop) contained a stop codon downstream of the *attR2* site that had to be removed by PCR directed site-specific mutagenesis. Primers *Eco*RI sense (GAATTCCAGCTGAGCGCCGGTCGCTAC SEQ ID NO: 59) and *Bg*II antisense (AGATCTTCATTCTCACCACTTGTACAAG SEQ ID NO: 60) were used to

amplify a fragment from pVL1393 Mel Stop, and the resulting 209 bp fragment was cut with *Eco*RI and *Bgl*II, and then ligated to pVL1393 Mel Stop cut with the same enzymes. The correct clone was identified by restriction digestion and sequence analysis. This gave pVL1393 Mel no-Stop.

Please amend paragraph [0599] as follows:

[0599] Next, a V5-His tag was added downstream of the *attR*2 site. The V5/His sequence was amplified from pIND/V5-His-TOPO (catalog no. K101001, Invitrogen Corporation, Carlsbad, CA) with primers containing *Bgl*II sites at each 5' end (V5/His 5': AGATCTGGGAAGCCTATCCCTAACCC SEQ ID NO: 61; V5/His 3': AGATCTCAATGGTGATGGTGTGATGACCGG SEQ ID NO: 62). The amplicon was cloned into pCR2.1 TOPO TA and then removed by *Bgl*II digestion and ligated to pVL1393 Mel no-Stop cut with *Bgl*II. The correct clones were identified and verified by sequencing. This resulted in plasmid pVL1393 Mel/V5-His. The melittin signal was subsequently removed by replacing the melittin-*attR*1 sequence from pVL1393 Mel/V5-His with the *attR*1 sequence from pVL1393-Native, using *Not*I and *Bam*HI. The correct plasmid clones were verified by sequencing and dubbed pVL1393 V5/His. Fig. 27 shows a schematic of the strategy for construction of BaculoDirect™ DNA. In Fig. 27A, the GATEWAY™ counter selection cassette was cloned in the polyhedrin locus of wt AcMPNV by homologous recombination between with pVL1393 V5-His. The resulting virus DNA contains the counter selection cassette bounded by *attR* sites, immediately downstream of the polyhedrin promoter and upstream of the V5/His tag. In Fig. 27B, LR recombination between BaculoDirect™ DNA and an entry clone results in an expression virus in which the counter selection cassette is replaced by gene of interest.

Please amend paragraph [0626] as follows:

[0626] The present invention permits one skilled in the art to create replication-incompetent lentiviruses to deliver and express one or more sequences of interest (e.g., genes). These viruses (based loosely on HIV-1) can effectively transduce dividing and non-dividing mammalian cells (in culture or *in vivo*), thus broadening the possible applications beyond those of traditional Moloney (MLV)-based retroviral systems (Clontech, Stratagene, etc.). Directional TOPO and GATEWAY™ lentiviral vectors have been created to clone one or more genes of interest with a V5 epitope, if desired. The vectors also carry the blasticidin resistance gene (bsd) to allow for

the selection of transduced cells. Without additional modifications, these vectors can theoretically accommodate up to ~6 kb of foreign gene. Three supercoiled packaging plasmids (gag/pol, rev and VSV-G envelope) are provided to supply helper functions and viral proteins in *trans*. Finally, an optimized producer cell line (293FT) is provided that will facilitate production of high titer virus. A schematic representation of the production of a nucleic acid molecule comprising all or a portion of a lentiviral genome is shown in Figure 35. Plasmid maps of vectors adapted for use with GATEWAY™ and topoisomerase cloning in the production of nucleic acid molecules comprising all or a portion of a lentiviral genome are shown in Figures 36A (pLenti6/V5-DEST), 36B (pLenti6/V5-D-TOPO®), 36C (pLenti4/V5-DEST), and 36D (pLenti6/UbC/V5-DEST) respectively. The nucleotide sequences of the plasmids are provided in Tables 17-20 (SEQ ID NOS: 105-108, respectively). Plasmid maps of the three packaging plasmids pLP1, pLP2, and pLP/VSVG are shown in Figures 37A, 37B, and 37C respectively and the nucleotide sequences of these plasmids are provided as Tables 21 (SEQ ID NO: 109), 22 (SEQ ID NO: 110), and 23 (SEQ ID NO: 111), respectively.

Please amend paragraph [0634] as follows:

[0634] The oligonucleotides used for directional adaptation are listed below:

EcoRI (5' end): Non-regenerative site

Topo-D1 5' P-AATTGATCCCTTCACCGACATAGTACAG 3' (SEQ ID NO: 63)
Topo-D2 5' P-GGTGAAGGGATC 3' (SEQ ID NO: 64)

XhoI (3' end): Regenerative site

Topo-D6 5' P-TCGAGCCCTTGACATAGTACAG 3' (SEQ ID NO: 65)
Topo-D7* 5' P-AAGGGC 3' (SEQ ID NO: 66)

Please amend paragraph [0776] as follows:

[0776] Table 26 provides some of the characteristics of the vector pLP2. The complete sequence is provided as Table 22 (SEQ ID NO: 110). A plasmid map is provided as Figure 37B.

Please amend paragraph [0777] as follows:

[0777] Table 27 provides some of the characteristics of the vector pLP/VSVG. The complete sequence is provided as Table 23 (SEQ ID NO: 111). A plasmid map is provided as Figure 37C.

Please amend paragraph [0781] as follows:

- [0781] pLenti6/V5-DESTTM is an 8.7 kb vector adapted for use with the GATEWAYTM Technology, and is designed to allow high-level expression of recombinant fusion proteins in dividing and non-dividing mammalian cells using Invitrogen's ViraPowerTM Lentiviral Expression System. A map of the vector is provided as Figure 36A and the sequence of the vector is provided as Table 17 (SEQ ID NO: 105).

Please amend paragraph [0784] as follows:

- [0784] The pLenti4/V5-DEST and pLenti6/V5-DEST vectors use the human CMV immediate early promoter to allow high-level, constitutive expression of the gene of interest in mammalian cells(Andersson *et al.*, 1989; Boshart *et al.*, 1985; Nelson *et al.*, 1987). The sequence of the pLenti4/V5-DEST plasmid is provided as Table 19 (SEQ ID NO: 107). Although highly active in most mammalian cell lines, activity of the viral CMV promoter can be down-regulated in some cell lines due to methylation(Curradi *et al.*, 2002, *Mol. Cell. Biol.* 22, 3157-3173), histone deacetylation (Rietveld *et al.*, 2002, *EMBO J.* 21, 1389-1397), or both.

Please amend paragraph [0785] as follows:

- [0785] The pLenti6/UbC/V5-DEST vector uses the human UbC promoter to allow constitutive, but more physiological levels of expression from the gene of interest in mammalian cells (Marinovic *et al.*, 2000, *Biophys. Res. Comm.* 274, 537-541). The sequence of the pLenti6/UbC/V5-DEST plasmid is provided as Table 20 (SEQ ID NO: 108). When compared to the CMV promoter, the UbC promoter is generally 2-4 fold less active. The UbC promoter is not down-regulated, making it useful for transgenic studies (Gill *et al.*, 2001, *Gene Ther.* 8, 1539-1546; Lois *et al.*, 2002, *Science* 295, 868-872; Marinovic *et al.*, 2000; Schorpp *et al.*, 1996, *Nuc. Acids Res.* 24, 1787-1788; Yew *et al.*, 2001, *Mol. Ther.* 4, 75-82). The human ubiquitin C (UbC) promoter (in pLenti6/UbC/V5-DEST) allows high-level expression of recombinant protein in most mammalian cell lines (Wulff *et al.*, 1990, *FEBS Lett.* 261, 101-105) and in virtually all tissues tested in transgenic mice (Schorpp *et al.*, 1996). The diagram below shows the features of the UbC promoter as described by Nenoi *et al.*, 1996 *Gene* 175, 179-185.

Please amend paragraph [0791] as follows:

- [0791] pLenti4/V5-DEST, pLenti6/V5-DEST, and pLenti6/UbC/V5-DEST are C-terminal fusion vectors. To express a fusion polypeptide of a polypeptide encoded by a sequence of interest with the V5 epitope coding sequence present in the vector, a sequence of interest must contain an ATG initiation codon in the context of a Kozak translation initiation sequence for proper initiation of translation in mammalian cells (Kozak, 1987; Kozak, 1991; Kozak, 1990). An example of a Kozak consensus sequence is (**G/A**)NNATGG (SEQ ID NO: 159). Other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold). The ATG initiation codon is underlined. The reading frame of the polypeptide encoded by the sequence of interest must be in frame with the C-terminal tag containing the V5 epitope after recombination and the sequence of interest must not contain a stop codon in this reading frame. The C-terminal peptide containing the V5 epitope and the attB2 site will add approximately 4.5 kDa to the size of the polypeptide encoded by the sequence of interest.

Please amend paragraph [0796] as follows:

- [0796] Figure 46A (SEQ ID NO: 150) provides a diagram of the recombination region of pLenti6/V5-DESTTM or pLenti4/V5-DEST after a recombination reaction with a sequence of interest. Shaded regions correspond to the sequence of interest transferred from the entry clone into the pLenti6/V5-DESTTM vector by recombination. Non-shaded regions are derived from the pLenti6/V5-DESTTM or pLenti4/V5-DEST vector. Bases 2448 and 4130 of the pLenti4/V5-DEST and pLenti6/V5-DESTTM sequences are marked. Restrictions sites are labeled to indicate the actual cleavage site.

Please amend paragraph [0797] as follows:

- [0797] Figure 46B (SEQ ID NO: 151) shows the recombination region of the expression clone resulting from pLenti6/UbC/V5-DEST x entry clone. Note that this diagram does not contain the complete sequence of the UbC promoter. For a diagram of the UbC promoter see Figures 46C and 46D (SEQ ID NO: 136). Shaded regions in Figure 46B correspond to those DNA sequences transferred from the entry clone into the pLenti6/UbC/V5-DEST vector by recombination. Non-shaded regions are derived from the pLenti6/UbC/V5-DEST vector. Bases 3079 and 4762 of the pLenti6/UbC/V5-DEST sequence are marked.

Please amend paragraph [0799] as follows:

- [0799] To confirm that a gene of interest is in frame with the C-terminal tag, sequence the expression construct, if desired. Refer to Figure 46 for the location of the recommended primer binding sites (CMV or UbC forward priming site and V5(C-term) reverse priming site) to use to sequence the expression construct. To sequence a pLenti4/V5-DEST or pLenti6/V5-DEST construct, the CMV forward primer 5'-CGCAAATGGCGGTAGGCGTG-3' (SEQ ID NO: 66) and V5(C-term) reverse primer 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 67) can be used. To sequence a pLenti6/UbC/V5-DEST construct, the UB forward primer 5'-TCAGTGTAGACTAGTAAATTG-3' (SEQ ID NO: 68) and the V5(C-term) reverse primer 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 69) can be used.

Please amend paragraph [0802] as follows:

- [0802] The pLenti6/V5-DESTTM vector (8688 bp, SEQ ID NO: 105) contains the following features at the indicated locations. The locations of the features in the pLenti6/V5-DEST plasmid are as follows: RSV/5' LTR hybrid promoter bases 1-410; RSV promoter bases 1-229; HIV-1 5' LTR bases 230-410; 5' splice donor base 520; HIV-1 psi (ψ) packaging signal bases 521-565; HIV-1 Rev response element (RRE) bases 1075-1308; 3' splice acceptor base 1656; 3' splice acceptor base 1684; CMV promoter bases 1809-2392; *attR1* site: bases 2440-2564; Chloramphenicol resistance gene (Cm^R) bases 2673-3332; *ccdB* gene bases 3674-3979; *attR2* site bases 4020-4144; V5 epitope bases 4197-4238; SV40 early promoter and origin bases 4293-4602; EM7 promoter bases 4657-4723; Blasticidin resistance gene bases 4724-5122; $\Delta U3/3'$ LTR bases 5208-5442; $\Delta U3$ bases 5208-5261; 3' LTR: bases 5262-5442; SV40 polyadenylation signal bases 5514-5645; *bla* promoter bases 6504-6602; Ampicillin (*bla*) resistance gene bases 6603-7463; and pUC origin bases 7608-8281.

Please amend paragraph [0803] as follows:

[0803] The pLenti4/V5-DEST vector (8634 nucleotides, SEQ ID NO: 107) contains the following features at the indicated locations: RSV/5' LTR hybrid promoter bases 1-410; RSV promoter bases 1-229; HIV-1 5' LTR bases 230-410; 5' splice donor base 520; HIV-1 psi (ψ) packaging signal bases 521-565; HIV-1 Rev response element (RRE) bases 1075-1308; 3' splice acceptor base 1656; 3' splice acceptor base 1684; CMV promoter bases 1809-2392; *attR1* site bases 2440-2564; Chloramphenicol resistance gene (Cm^R) bases 2673-3332; *ccdB* gene bases 3674-3979; *attR2* site bases 4020-4144; V5 epitope bases 4197-4238; SV40 early promoter and origin bases 4293-4602; EM7 promoter bases 4621-4687; Zeocin™ resistance gene bases 4688-5062; Δ U3/3' LTR bases 5154-5388; Δ U3 bases 5154-5207; 3' LTR bases 5208-5388; SV40 polyadenylation signal bases 5460-5591; *bla* promoter bases 6450-6548; Ampicillin (*bla*) resistance gene bases 6549-7409; and the pUC origin bases 7554-8227.

Please amend paragraph [0804] as follows:

[0804] The pLenti6/UbC/V5-DEST vector (9320 nucleotides, SEQ ID NO: 108) contains the following features at the indicated locations: RSV/5' LTR hybrid promoter bases 1-410; RSV promoter bases 1-229; HIV-1 5' LTR bases 230-410; 5' splice donor base 520; HIV-1 psi (ψ) packaging signal bases 521-565; HIV-1 Rev response element (RRE) bases 1075-1308; 3' splice acceptor base 1656; 3' splice acceptor base 1684; UbC promoter bases 1798-3016; *attR1* site bases 3072-3196; Chloramphenicol resistance gene (Cm^R) bases 3305-3964; *ccdB* gene bases 4306-4611; *attR2* site bases 4652-4776; V5 epitope bases 4829-4870; SV40 early promoter and origin bases 4925-5234; EM7 promoter bases 5289-5355; Blasticidin resistance gene bases 5356-5754; Δ U3/3' LTR bases 5840-6074; Δ U3 bases 5840-5893; 3' LTR bases 5894-6074; SV40 polyadenylation signal bases 6146-6277; *bla* promoter bases 7136-7234; Ampicillin (*bla*) resistance gene bases 7235-8095; and the pUC origin bases 8240-8913.

Please amend paragraph [0805] as follows:

[0805] The following protocol may be used to clone a nucleic acid segment using topoisomerase. Other protocols known to those skilled in the art are also suitable. An example of another suitable protocol may be found in the pENTR Directional TOPO® Cloning Kit manual available from Invitrogen Corporation, Carlsbad, CA (catalog number 25-0434).

Step	Action
Design PCR Primers	Include the 4 base pair sequences (CACC, <u>SEQ ID NO: 163</u>) necessary for directional cloning on the 5' end of the forward primer. Design the primers such that a gene of interest will be optimally expressed and fused in frame with the V5 epitope tag, if desired.

Please amend paragraph [0809] as follows:

- [0809] The sequences of CMV Forward and V5(C-term) Reverse sequencing primers. Two micrograms of each primer are as follows:

CMV Forward 5'-CGCAAATGGGCGGTAGGCGTG-3' (SEQ ID NO: 66)

V5(C-term) Reverse 5'-ACCGAGGAGAGGGTTAGGGAT-3' (SEQ ID NO: 67)

Please amend paragraph [0819] as follows:

- [0819] In this system, PCR products are directionally cloned by adding four bases to the forward primer (CACC, SEQ ID NO: 163). The overhang in the cloning vector (GTGG, SEQ ID NO: 164) invades the 5' end of the PCR product, anneals to the added bases, and stabilizes the PCR product in the correct orientation. Inserts can be cloned in the correct orientation with efficiencies equal to or greater than 90%. A schematic representation of the process is shown in Figure 47 (SEQ ID NO: 137).

Please amend paragraph [0821] as follows:

- [0821] When designing a forward PCR primer, consider the points below. Refer to Figure 48 (SEQ ID NO: 138) for a diagram of the TOPO® Cloning site for pLenti6/V5-D-TOPO®.

Please amend paragraph [0822] as follows:

- [0822] To enable directional cloning, the forward PCR primer **MUST** contain the sequence, CACC (SEQ ID NO: 163), at the 5' end of the primer. The 4 nucleotides, CACC (SEQ ID NO: 163), base pair with the overhang sequence, GTGG (SEQ ID NO: 164), in the pLenti6/V5-D-TOPO® vector.

Please amend paragraph [0823] as follows:

- [0823] The sequence of interest should include a Kozak translation initiation sequence with an ATG initiation codon for proper initiation of translation (Kozak, 1987; Kozak, 1991; Kozak, 1990). An example of a Kozak consensus sequence is **(G/A)NNATGG** (SEQ ID NO: 159). Other sequences are possible, but the G or A at position -3 and the G at position +4 are the most critical for function (shown in bold). The ATG initiation codon is underlined.

Please amend paragraph [0824] as follows:

- [0824] Below is the DNA sequence of the N-terminus of a theoretical protein and the proposed sequence for a forward PCR primer. The ATG initiation codon is underlined.

DNA sequence: 5'-ATG GGA TCT GAT AAA (SEQ ID NO: 69)

Proposed Forward PCR primer: 5'-C ACC ATG GGA TCT GAT AAA (SEQ ID NO: 70)

If the forward PCR primer is designed as above, then the primer includes the 4 nucleotides, CACC (SEQ ID NO: 163), required for directional cloning, and the ATG initiation codon falls within the context of a Kozak sequence (see boxed sequence), allowing proper translation initiation of the PCR product in mammalian cells. The first three base pairs of the PCR product following the 5' CACC (SEQ ID NO: 163) overhang will constitute a functional codon.

Please amend paragraph [0825] as follows:

- [0825] When designing a reverse PCR primer, consider the points below. Refer to Figure 48 (SEQ ID NO: 152) for a diagram of the TOPO® Cloning site for pLenti6/V5-D-TOPO®. To ensure that the PCR product clones directionally with high efficiency, the reverse PCR primer should not be complementary to the overhang sequence GTGG (SEQ ID NO: 164) at the 5' end. A one base pair mismatch can reduce the directional cloning efficiency from 90% to 50%, increasing the likelihood of the PCR product cloning in the opposite orientation (see below). Evidence of PCR products cloning in the opposite orientation from a two base pair mismatch has not been observed.

Please amend paragraph [0827] as follows:

- [0827] First Example of Reverse Primer Design. Below is the sequence of the C-terminus of a theoretical protein. The stop codon is underlined.

DNA sequence: AAG TCG GAG CAC TCG ACG ACG GTG TAG-3' (SEQ ID NO: 71)

Please amend paragraph [0828] as follows:

- [0828] To fuse the protein in frame with the C-terminal tag in pLenti6/V5-D-TOPO®, design the reverse PCR primer to start with the codon just up-stream of the stop codon, but the last two codons contain GTGG (SEQ ID NO: 164, underlined below), which is identical to the 4 bp overhang sequence. As a result, the reverse primer will be complementary to the 4 bp overhang sequence, increasing the probability that the PCR product will clone in the opposite orientation. This situation should be avoided.

DNA sequence: AAG TCG GAG CAC TCG ACG ACG GTG TAG-3' (SEQ ID NO: 71)

Proposed Reverse PCR primer sequence: TG AGC TGC TGC CAC AAA-5' (SEQ ID NO: 160)

Please amend paragraph [0831] as follows:

- [0831] Below is the sequence for the C-terminus of a theoretical protein. The stop codon is underlined.

...GCG GTT AAG TCG GAG CAC TCG ACG ACT GCA TAG-3' (SEQ ID NO: 73)

Please amend paragraph [0832] as follows:

- [0832] To fuse the ORF in frame with the C-terminal tag in pLenti6/V5-D-TOPO®, remove the stop codon by starting with nucleotides homologous to the last codon (TGC) and continue upstream. The reverse primer will be:

5'-TGC AGT CGT CGA GTG CTC CGA CTT-3' (SEQ ID NO: 74)

Please amend paragraph [0833] as follows:

- [0833] This will amplify the C-terminus without the stop codon and allow the ORF to be joined in frame with the C-terminal tag. To avoid joining the ORF in frame with a C-terminal tag, design the reverse primer to include the stop codon.

5'-CTA TGC AGT CGT CGA GTG CTC CGA CTT-3' (SEQ ID NO: 75)

Please amend paragraph [0834] as follows:

- [0834] pLenti6/V5-D-TOPO® accepts blunt-end PCR products. Do not add 5' phosphates to primers for PCR. This will prevent ligation into the pLenti6/V5-D-TOPO® vector. It is recommended that oligonucleotides be gel-purified, especially if they are long (> 30 nucleotides). Note that pLenti6/V5-D-TOPO® is supplied linearized with both ends adapted with topoisomerase I (see Figure 47, SEQ ID NO: 137). The sequence of pLenti6/V5-D-TOPO™ is provided as Table 18 (SEQ ID NO: 106).

Please amend paragraph [0852] as follows:

- [0852] The sequence for pLenti6/V5-D-TOPO® shown in Table 18 (SEQ ID NO: 106) includes the overhang sequence (GTGG, SEQ ID NO: 164) hybridized to CACC (SEQ ID NO: 163).

Please amend paragraph [0891] as follows:

- [0891] Vector construction. (a) pUC12-tRNA^{TAG} : Three suppressor tRNA vectors were received from Dr. Uttam RajBhandary of Massachusetts Institute of Technology. Each suppressor tRNA vector, designated pUCtS Su+ amber, opal, and ochre, is identical except for the stop anticodon (Capone *et. al.* 1985, *EMBO*, 4(1):213-221). For convenience, the pUCtS Su+ amber vector is now referred to as pUC12-tRNA^{TAG}. To create a tetracycline-regulated version, referred to herein as pUC12-TO-tRNA^{TAG}, two tetracycline operators (tetO₂) were cloned into the *SnaBI* site in pUC12-tRNA^{TAG} using the following annealed oligonucleotides:
tetO₂ Forward primer

5' GACTCGAGTCTCCCTATCAGTGATAGAGATCTCGAGGTC 3' (SEQ ID NO: 76) and

tetO₂ Reverse primer

5'GACCTCGAGATCTCTATCACTGATAGGGAGACTCGAGTC3' (SEQ ID NO: 77).

In italics is a unique *BglII* site that was introduced with the oligonucleotide. The underlined sequences are *XhoI* sites. All tRNA constructs were sequence verified.

(b) pcDNA6.2/GFP-DEST: pcDNA6.2/V5-DEST was digested with *ApaI* and *PmeI* to remove the V5 tag. pcDNA3.1/lacZ-stop^{TAG}-GFP was also digested with *ApaI* and *PmeI* to isolate the GFP fragment. The GFP fusion tag was ligated to the pcDNA6.2 DEST vector (Invitrogen Corporation, Carlsbad, CA catalog # 12489-027) and transformed into DB3.1 cells. Colonies were grown on LB-Amp plates. A clone was selected that resulted in correct band fragments when digested with *NdeI* and then sequence confirmed.

(c) pENTR CAT^{TAA, TAG, TGA} The GATEWAY™ CAT entry clones were PCR amplified followed by TOPO cloning (Invitrogen Corporation, Carlsbad, CA product manual #25-0434) into pENTR dT. Information for both vectors may be obtained by contacting Invitrogen Corporation, Carlsbad, CA. The primer sequences used were

Forward primer: 5' CACCATGGAGAAAAAAATCACTGG 3' (SEQ ID NO: 78)

Reverse primer: 5' CTGCTACGCCCGCCCTGC 3' (SEQ ID NO: 79).

The underlined sequence varied depending on which stop codon was required. Plasmid constructs were sequence verified.

(d) pcDNA3.2/V5-GW/CAT^{TAA, TAG, TGA}: pcDNA3.2/V5-DEST and pENTR CAT with each of the stops was recombined using LR clonase to generate the plasmids pcDNA3.2/V5-GW/CAT^{TAA, TAG, TGA}. Clones were identified as correct by restriction enzyme digests and sequence confirmed.

(e) pcDNA6.2/GFP-GW/CAT^{TAA, TAG, TGA}: pcDNA6.2/GFP-DEST and pENTR CAT with each of the stops was recombined using LR clonase to generate the plasmids pcDNA6.2/GFP-GW/CAT^{TAA, TAG, TGA}. Clones were identified as correct by restriction enzyme digests and sequence confirmed.

(f) pENTR p48^{TAG}: This GATEWAY™ Entry clone was obtained from the Ultimate™ ORFeome Collection (Invitrogen Corporation, Carlsbad, CA) and is referred to by several names: HS8-E6 (internal Invitrogen designation), BC000141 (GenBank Accession number), or ORF 12 (used for convenience). This ORF is referred to as p48 and is a human c-myc variant (see Results section). Information for this clone may be obtained by contacting Invitrogen Corporation, Carlsbad, CA or GenBank.

(g) pcDNA6.2/GFP-GW/p48^{TAG}: pcDNA6.2/GFP-DEST and pENTR p48^{TAG} were recombined with LR clonase to generate pcDNA6.2/GFP-GW/p48^{TAG}. The recombination

reaction was transformed into TOP10 cells (Invitrogen Corporation, Carlsbad, CA, catalog #C4040-10) and plated on LB Ampicillin plates. Colonies were picked and clones were identified as correct by restriction enzyme digests and functional suppression.

(h) pcDNA6.2/V5-GW/p48^{TAG} : pcDNA6.2/V5-DEST and pENTR p48^{TAG} were recombined with LR clonase to generate the plasmid pcDNA6.2/V5-GW/p48^{TAG}. The recombination reaction was transformed into TOP10 cells and plated on LB Ampicillin plates. Colonies were picked and clones were identified as correct by restriction enzyme digests and functional suppression.

(i) pENTR-T0-tRNA^{TAG} : pENTR1A (Invitrogen Corporation, Carlsbad, CA) and pUC12-T0-tRNA^{TAG} (described in (a) above) were digested with *SalI* and *EcoRI*. Following digests, the appropriate bands were gel purified and ligated. Ligations were transformed into TOP10 cells and plated on LB-Kanamycin plates. Clone 1 was selected following *SalI* and *EcoRI* diagnostic digests.

(j) pENTR-tRNA8^{TAG} : Primers were created to PCR amplify the tRNA gene from pUC12 TO tRNA^{TAG} with *EcoRI* and *XbaI* sequences at the 5'end, and *SpeI* and *HindIII* at the 3' end. The primer sequences were:

Forward primer:

5' CACCGAATTCTCTAGAGATGTCTGTGAAAAGAACAT 3' (SEQ ID NO: 80) and

Reverse primer:

5' ATATAAGCTTACTAGTCGGATTCCCTCTACCCGAGA 3' (SEQ ID NO: 81).

The tRNA PCR product was gel purified, TOPO cloned into pENTR dT, and transformed into TOP10 cells. Colonies were selected on LB Kanamycin plates. Upon confirmation of proper insertion, two separate digests were conducted. The first digest with *EcoRI* and *XbaI* opened the pENTR-tRNA^{TAG}. The second digest with *EcoRI* and *SpeI* excised the tRNA gene. Correct fragments were gel purified, the two fragments were ligated, as *XbaI* and *SpeI* have complimentary ends, thus creating a dimer of tRNA. With confirmation of proper insertion, the same two previous digests were repeated with the dimer plasmid, fragments gel purified, ligations performed creating a tetramer. A final two digests, as previously described, were repeated on the tetramer, fragments gel purified, ligations performed creating an octamer tRNA in the pENTR backbone. (Buvoli *et al.*, *Mol. Cell. Biol.* 20:3116-3124 (2000), Suppression of Nonsense Mutations in Cell Culture and Mice by Multimerized Suppressor tRNA Genes).

Please amend paragraph [0892] as follows:

[0892] Adenovirus carrying the suppressor tRNA^{TAG} was created using a GATEWAY™ LxR reaction. pAd/PL-DEST vector (Table 10 (SEQ ID NO: 87), Figure 9) was recombined with either pENTR-tRNA^{TAG} or pENTR-tRNA8^{TAG} to create pAd-tRNA^{TAG} (Table 8, SEQ ID NO: 85) or pAd-tRNA8^{TAG} expression vectors, respectively. These vectors were subsequently cut with *PacI* and transfected into TREx 293 (Invitrogen Corporation, Carlsbad, CA, catalog #R710-07) cells to produce the initial stocks of recombinant adenovirus. Subsequent virus amplification and titering was performed in 293A cells as previously described in Example 4.

Please amend paragraph [0909] as follows:

[0909] The tRNA^{TAG} gene was cloned into pENTR to create pENTR-tRNA^{TAG}, and this was used in a GATEWAY™ LR reaction with pAd/PL-DEST (Table 10 (SEQ ID NO: 87), Figure 9) to create pAd-tRNA^{TAG}. Several large-scale preparations of virus were performed and functional testing was done. Adenovirus proved to be a very efficient way of delivering the tRNA, however preliminary experiments required MOIs (multiplicity of infection) of several hundred to deliver biologically relevant amounts of the tRNA. The goal was to achieve at least 50% suppression using an MOI of 50 in COS cells transfected with one of the reporter genes. It is believed that the tRNAs must compete with endogenous protein “stop factors” occupying the stop codon, which may explain the more efficient suppression in the presence of multiple copies of the nucleic acid molecule encoding the suppressor tRNA sequence. In an attempt to reduce the number of viral particles required for efficient suppression, eight copies of the tRNA gene were cloned into pENTR (called pENTR-tRNA8^{TAG}) and recombined into the adenovirus promoterless Destination vector. This new adenovirus (Adeno-tRNA8^{TAG}) was compared with the original monomer virus (Adeno-tRNA^{TAG}) for stop suppression (Figure 53). As shown by both fluorescent microscopy (upper panels) and anti-β-galactosidase western blotting (lower panel), a modest increase in suppression efficiency was observed with the 8-mer tRNA, and these suppression levels are as good as those seen with the plasmid-based tRNA (lanes 2 and 4). Indeed, in all subsequent experiments, the Ad-tRNA8^{TAG} transduction performed as well or better than a pUC-tRNA^{TAG} plasmid transfection making this recombinant adenovirus configuration particularly suitable for the methods of this invention.

Please amend paragraph [0927] as follows:

[0927] The pcDNA™6.2/V5-DEST and pcDNA™6.2/GFP-DEST vectors enable expression of recombinant polypeptide containing a choice of C-terminal tags. The pcDNA™6.2/V5-DEST vector encodes the V5 epitope for detection of recombinant polypeptide using the Anti-V5 antibodies. A plasmid map is provided as Figure 57 and the sequence of this vector is provided as Table 28 (SEQ ID NO: 112). The pcDNA™6.2/GFP-DEST vector encodes the Cycle-3 GFP for fusion to a polypeptide sequence of interest and use as a reporter gene. A plasmid map of this vector is provided as Figure 58 and the sequence of this vector is provided as Table 29 (SEQ ID NO: 113).

Please amend paragraph [0929] as follows:

[0929] The location in the plasmid sequence of pcDNA™6.2/V5-DEST (7341 nucleotides, SEQ ID NO: 112) of the features discussed above are: CMV promoter bases 232-819; T7 promoter/priming site bases 863-882; *attR1* site bases 911-1035; *ccdB* gene bases 1464-1769 (c); chloramphenicol resistance gene bases 2111-2770 (c); *attR2* site bases 3051-3175; V5 epitope bases 3201-3242; V5 reverse priming site 3210-3230; TK polyadenylation signal bases 3269-3540; f1 origin 3576-4004; SV40 early promoter and origin 4031-4339; EM7 promoter bases 4394-4460; Blasticidin resistance gene bases 4461-4859; SV40 early polyadenylation signal bases 5017-5147; pUC origin bases 5530-6200 (c); Ampicillin (*bla*) resistance gene bases 6345-7205 (c); *bla* promoter bases 7206-7304 (c) where (c) indicates present on the complementary strand.

Please amend paragraph [0930] as follows:

[0930] The location in the plasmid sequence of pcDNA™6.2/GFP-DEST (7995 nucleotides, SEQ ID NO: 113) of the features discussed above are: CMV promoter bases 232-819; T7 promoter/priming site bases 863-882; *attR1* site bases 911-1035; *ccdB* gene bases 1464-1769 (c); Chloramphenicol resistance gene bases 2111-2770 (c); *attR2* site bases 3051-3175; Cycle-3 GFP bases 3195-3908; GFP reverse priming site 3303-3324; TK polyadenylation signal bases 3923-4194; f1 origin 4230-4658; SV40 early promoter and origin 4685-4993; EM7 promoter bases 5048-5114; Blasticidin resistance gene bases 5115-5513; SV40 early polyadenylation signal bases 5671-5801; pUC origin bases 6184-6854 (c); Ampicillin (*bla*) resistance gene bases

6999-7859 (c); *bla* promoter bases 7860-7958 (c), where (c) indicates the feature is present on the complementary strand.

Please amend paragraph [0939] as follows:

[0939] The recombination region of pcDNATM6.2/V5-DEST and pcDNA6.2/GFP-DEST are provided as Figures 61A (SEQ ID NO: 153) and 61B (SEQ ID NO: 154) respectively. In Figure 61A (SEQ ID NO: 153), shaded regions correspond to those DNA sequences transferred from the entry clone into the pcDNATM6.2/V5-DEST vector by recombination. Non-shaded regions are derived from the pcDNATM6.2/V5-DEST vector. The sequences encoded by the gene of interest are boxed. To facilitate use with the Tag-on-DemandTM System, a gene of interest must contain a TAG stop codon and be in-frame with the C-terminal tag. Bases 918 and 3161 of the pcDNATM6.2/V5-DEST sequence are marked. Note that TAA and TGA stop codons are included downstream of the V5 epitope to allow translation termination in the Tag-on-DemandTM System. In Figure 61B (SEQ ID NO: 154), the recombination region of the expression clone resulting from pcDNATM6.2/GFP-DEST x entry clone is shown. The shaded regions correspond to those DNA sequences transferred from the entry clone into the pcDNATM6.2/GFP-DEST vector by recombination. Non-shaded regions are derived from the pcDNATM6.2/GFP-DEST vector. The sequences encoded by the gene of interest are boxed. To facilitate use with the Tag-on-DemandTM System, the gene of interest should contain a TAG stop codon. Bases 918 and 3161 of the pcDNATM6.2/GFP-DEST sequence are marked. TAA and TGA stop codons are included downstream of the GFP gene to allow translation termination in the Tag-on-DemandTM System (not shown).

Please amend paragraph [0951] as follows:

[0951] To confirm that a gene of interest is in the correct orientation and in frame with the C-terminal fusion tag, the expression construct can be sequenced. The following primers can be used to sequence an expression construct. Figures 61A (SEQ ID NO: 153) and 61B (SEQ ID NO: 154) provide the location of the primer binding sites in each vector. For sequencing the pcDNATM6.2/V5-DEST vector, an oligonucleotide that binds to the T7 promoter/priming site (e.g., 5'-TAATACGACTCACTATAGGG-3' SEQ ID NO: 45) and an oligonucleotide that binds to the V5(C-term) reverse priming site (e.g., 5'-ACCGAGGAGAGGGTTAGGGAT-3' SEQ ID

NO: 46) can be used. To sequence the pcDNA™6.2/GFP-DEST vector, an oligonucleotide that binds to the T7 promoter/priming site (*e.g.*, 5'-TAATACGACTCACTATAGGG-3' SEQ ID NO: 45) and an oligonucleotide that binds to the GFP reverse priming site (*e.g.*, 5'-GGGTAAGCTTCCGTATGTAGC-3' SEQ ID NO: 82) can be used.

Please amend paragraph [1002] as follows:

[1002] In some embodiments, methods of the invention may be used to create a nucleic acid molecule encoding a fusion polypeptide. According to one aspect of the invention, a nucleic acid molecule encoding a fusion polypeptide may be constructed by combining a first nucleic acid molecule having a first nucleic acid sequence encoding a polypeptide sequence (*e.g.*, a polypeptide of interest) with a second nucleic acid molecule having a second nucleic acid sequence encoding an additional polypeptide sequence (*e.g.*, a polypeptide tag sequence). A nucleic acid molecule encoding a polypeptide of interest should contain an ATG initiation codon in the context of a Kozak consensus sequence for proper initiation of translation in mammalian cells (Kozak, 1987; Kozak, 1991; Kozak, 1990). An example of a Kozak consensus sequence is **(G/A)NNATGG** (SEQ ID NO: 159), where the ATG initiation codon is underlined. Other sequences are possible, but the G or A at position -3 and G at position +4 are the most critical for function (shown in bold).

Please amend paragraph [1075] as follows:

[1075] In one particular embodiment, the present invention provides two nucleic acid molecules (*e.g.*, plasmids, viral vectors etc.) that may be used in the practice of the invention. A first nucleic acid molecule comprises a repressor sequence and a promoter and may comprise a sequence of interest operably linked to the repressor and promoter. A first nucleic acid molecule may also comprise one or more recognition sequences (*e.g.*, recombination sites, topoisomerase sites, restriction enzyme sites, etc.). One non-limiting example of a first nucleic acid molecule is the plasmid, pLenti4/TO/V5-DEST, which contains two copies of the tetracycline operator sequence (TO) within the CMV promoter (CMVTetO₂). A map of this vector is provided as Figure 70A and the nucleotide sequence is provided in Table 31 (SEQ ID NO: 115). This plasmid also contains two recombination sites that do not recombine with each other. A sequence of interest may be operably linked to the promoter and repressor using any technique

known in the art. In one embodiment, a sequence of interest may be operably linked to the promoter and repressor by conducting a recombination reaction between a sequence of interest flanked by recombination sites and the nucleic acid molecule of the invention. For example, pLenti4/TO/V5-DEST (Figure 70A) can be reacted with a sequence of interest flanked by *attR1* and *attR2* sites to operably link the sequence of interest to the CMV promoter and tetracycline operator in a LR-recombination reaction. The reaction places the sequence of interest downstream of CMVTetO₂ for regulated expression in the presence of the tetracycline repressor protein.

Please amend paragraph [1076] as follows:

A second nucleic acid molecule of the invention may express one or more proteins that interact with repressor sequences. One non-limiting example of a repressor protein is the tetracycline repressor protein (TetR). One example of a suitable second nucleic acid molecule is the repressor plasmid pLenti6/TR, which expresses TetR. A map of this vector is provided as Figure 69 and the nucleotide sequence is provided as Table 32 (SEQ ID NO: 116). TetR binds the tetracycline operator sites in CMVTetO₂ promoter on the expression vector and blocks transcription from the promoter in the absence of inducer. When tetracycline inducer binds TetR, however, the latter dissociates from the promoter and transcription proceeds.

Please amend paragraph [1082] as follows:

[1082] A nucleic acid molecule expressing the tetracycline repressor protein may be constructed using any technique known in the art. For example, a nucleic acid fragment containing the tetracycline repressor coding sequence can be cloned using any technique known in the art. The nucleotide sequence of a nucleic acid fragment containing the coding sequence for the tetracycline repressor is provided as Table 35 (SEQ ID NO: 119). The 1.4 kb fragment also contains the β-globin intron. The 1.4 kb TetR-containing fragment was cloned into pLenti6/V5 (Invitrogen Corporation, Carlsbad, CA). A map of pLenti6/V5 is provided as Figure 71 and the nucleotide sequence is provided as Table 33 (SEQ ID NO: 117). The resulting plasmid, pLenti6/TR, was verified by restriction digest and sequence analyses. A map of pLenti6/TR is shown in Figure 69. pLenti6/TR can be used to generate blasticidin resistant mammalian cells that stably express the tetracycline repressor, TetR.

Please amend paragraph [1083] as follows:

[1083] Nucleic acid molecules comprising a promoter sequence and a repressor sequence can be constructed using any techniques known in the art. For example, pLenti4/TO/V5-DEST was created from pLenti3/V5-TREx (Invitrogen Corporation, Carlsbad, CA), by replacing the neomycin resistance gene of the latter with the zeocin resistance gene. pLenti3/V5-TREx contains the CMV promoter and Tet operators of pT-REx-DEST30 (Invitrogen Corporation, Carlsbad, CA catalog no. 12301016). A map of pLenti3/V5-TREx is provided as Figure 72 and the nucleotide sequence is provided in Table 34 (SEQ ID NO: 118).

Please amend paragraph [1104] as follows:

[1104] The restriction enzyme sites may be located such that a 3'-overhang of a desired length is produced on the strand containing the topoisomerase cleavage site (after the 3'-T in Fig. 73). The location of the topoisomerase cleavage site may be varied with respect to 3'-most nucleotide of the strand containing the cleavage site. This may be useful in generating a 5'-overhang on the opposite strand after topoisomerase cleavage in order to generate a sequence that can invade a double-stranded insert (see Figure 47, SEQ ID NO: 137).

Please amend Table 6 on pages 344-353 as follows:

Table 6: Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

catcatcaataatataccttatttgattgaagccaatatgataatgaggggtggagttgtgacgtggcgccccgtggaaacggggc
gggtgacgtagtagtgtggcgaagtgtatgtcaagtgtggcggacacatgtaagcgacggatgtggcaaaagtgcacgttttggtg
tgcgccgggtgacacaggaaagtgacaatttcgcgcgggtttagccggatgttagtaaatttggcgtaccgagaagattggccattt
cgccggaaaactgaataagaggaagtgaaatctgataaatttggtagtactcatagcgcgtaatatttgcctaggccgcggggacttgacc
gttacgtggagactcgcccagggttttctcagggtttccgcgttccggtcaaagttggcggttattattatagtcatgcgatggat
ccggtagctctagaattctcgagccgcgtacgcacatcgatctccgatccctatggcgtactcgtacatctgcgtatgcgc
atagttaagccagtagtctgcctctgtgtgttagtgcgcgagcaaaatttaagctacaacaaggcaaggcttgac
cgacaatttgcataagaatctgcctagggtttaggcgtttgcgtacggccagatatacgccgttgcatttgcatttgcatttgc
agttattaaatagaatcaattacgggtttagtcatgcgcgttatgcgcgttgcatttgcatttgcatttgcatttgcatttgc
accgcctaaccgcggccattgacgtcaataatgacgtatgtcccatagtaacgcataaggacttccattgacgtcaatgggttgc
actatttgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
cctggcattatgccttgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
gcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
aatcaacggacttccaaaatgtcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
agagctctggcttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
tatcaacaagttgtacaaaaagctgaacgagaacgtaaaatgatataatcaatattaaatttagttgcataaaaaacagactaca
taatactgtaaaacacaatattccatgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
cggtgtatgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
gcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
acttactaaacgtataagttctgtatattctactgtatgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
tcaggtaatggcgtttgtatgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
ggtcatcatgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
ggatcaccatccgtgcccggcgttcaataatcactctgtatccacaacagacgataacggctctctttatagggttaac
taaactgcatttcaccatgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
tttccagcgttccgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
gatagctgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
cgcaaaaatcagcgcgcaatacgcatactgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
tactgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
ccttgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
ggattggctgagacaaaaacatatttcataaaaaacccctttagggaaataggccagggtttccgcgtacacgcgcacatttgcgttact
gtagaaactgcggaaatcgtgttactccatgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
ctatccatatcaccagctaccgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
ataaaaactgtgttacttttacggctttaaaaggccgtatccagctgttactgcgttactgcgttactgcgttactgcgttact
gcctcaaaaatgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
gataactcaaaaatcgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
gttggcccaggctccggatcaacaggacaccaggatttttgcgttactgcgttactgcgttactgcgttactgcgttact
gcgtcgggtgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
tatgtgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
gcccgcggcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact
aactgaaacacggaaaggagacaatccgttactgcgttactgcgttactgcgttactgcgttactgcgttact
gttggcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttactgcgttact

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

ccccccgcgttcttcctttcccccaccccaagttcgggtgaaggcccagggctcgacccaacgtcggggcggcaggcccctg
ccatagcagatccgattcgcacagactactgaaatgtgtggcgtggctaagggtggaaagaataatataagggtggggctttagttagttt
gtatctgtttgcagcagccgccgcccgcattgagcaccaactcgatggaaagcattgagctcatattgacaacgcgcacgcgcacgcgc
gggcccggggtgcgtcagaatgtatggcgtccagcattgatggcgtccctgcggccaaactctactaccitgacc tacgagaccgt
gtctggaaacgcgcgtggagactgcagccctccgcgcgtcagccgtcagccaccgcggcgggattgtgactgacttgccttcctg
agccgcgttgcagcagcgtcagccgttccgtcatccgcggcgtatgacaagttgacggctttggcacaattggattcttgaccggaa
cttaatgtcggttcagcagctgtttggatcaagcaagtgtctgtctttatagggtttgcgcgcggtaggcgggaccagcggct
cggtcggtgagggtccgtgtatttccaggacgtggtaaagggtactctggatgtcagatatacgatggcataagccgtctgggtgg
aggtagcaccactgcagagctcatgcgtcgggggtgttagatgatccagtcgtacgcaggagcgtgggtggcctaaaaatgt
cttcagtagcaagctgatggcaggggcaggccctggtaagtgtttacaaagcggtaagctggatggcatacgtgggatatg
agatgcacatggactgtattttaggttgctatgttccagccatatccctccggggattcatgttgccagaaccaccagcacagtgtatcc
ggtgcacttggaaatttgtatgttagttagggaaatgcgttggagacgcgcctgtgacccatgcggatatttccatgcattc
gtccatataatgtatggcaatggccacggcggccgtggcgaagatattctggatcatactacgtcatgtgttcaggatgaga
tcgtcataggccattttacaaagcgcggcggcagggtccagactgcgttataatgttccatccggccaggggcgttagtaccctcac
agatttgcatttccacgcattgagttcagatgggggatcatgttacctgcggggcgtatgaaaacgggttccgggttagggagat
cagctggaaagaaagcagggtccagcagctgcgacttaccgcagccgggtggccgtaaatcacacattaccgggtcaactggta
gttaagagagactgcagctgcgtatccctgagcagggggccacttgcgttaagcatgtccctgactgcgtatttccctgaccaaatccg
ccagaaggcgtcgcgcgcagcgtatgcagttctgcgtcaaggaagcaaagggttcaacgggttaggcgtccgcgttaggcgtatttg
agcgttgcaccaagcagttccaggcgggtccacagctcgtcacctgttacggcatctgcgtatccagcatactccctgtttcgcgggtgg
ggcggcttcgtgtacggcagtagtgcgtgtccagacggccagggtcatgtttccacggcgcagggtccctgcgttagcgt
ctgggtcacggtaaggggtgcgtccgggtgcgcgtggccagggtgcgttaggcgtggcgtctgtgtgaagcgcgtccgggt
cttcgcctcgcgtcggccaggtagcattgaccatgggtcatagtcgcagccctccgcggcgtggcgtggcgcagttccctt
ggaggaggcgcgcacgagggcagtcgactttgagggcgttagagcttggcgcgagaaataccgattccgggagtaggcac
cgcgcgcaggcccccgcagacggctcgcattccacgcgcaggtagcgtacttgcgcgttgcgggtcaaaaaccagggttcccccacgc
tttgcgttcttacctctggatccatgagccgtgtccacgcgtgtacgaaaaggctgtccgttccctgtatacagacttgagaggc
ctgtccctcgcagcgggttccgcggccctctgtatagaaactcgaccactctgcgtacgcacaaaggctgcgtccaggccagcac
gctaaatgtggagggtagcggcgtgtccactaggggtccactcgtccagggtgtgaagacacatgtcgcctcttcgcac
aaggtagtgggttgcgttaggttagccacgtgaccgggtgtccctgtacgggggtctataaaagggtggggcgttgcgtccact
cttcgcacgcgtgtcgagggccagctgtgggtgagacttccctgtacggggcatactctgcgtacgcgtatgtcgttcc
aaaacgaggaggattgtatattccatggccgcgggtatgccttgcggccatccatctgtgtacggaaaagacaatctttgtgt
caagcttgcgttgcacgcaccgttagagggcgttgcgtacgcacacttgcgtatggcgcagggttgcgttgcgtatgc
cttgcgcgtatgttagctgcacgtattcgcgcacgcaccgcattggaaagacgggtggcgtcgctgcgttgcgt
acgcgcacaccgcgggtgtcgtacgggtgacaaggtaacgcgttgcgttgcgtaccctctccgcgttaggcgtcgttgc
cgcccttgcgcagcagaatggcggtaggggtctagctgcgtctgcgtccgggggtctgcgtccacggtaaagacccggc
gcgcgcgtcgtacgttagtctatgcacgcgttgcgtacgcgttgcgtccatgcgcggcgtacgcgcgcgtatgggt
gggggacccatggcatgggtgggtgagcggcggagggtacatggcgtacgcgttgcgtacgcgttgcgt
gatatgttaggttagcatctccaccgcggatgtggcgcgcacgtatgcgtatgcgttgcgtacgcgttgcgt
ttgcgtacggcgggtgtcgtccatgcgttgcgtacgcgttgcgtacgcgttgcgt
gctggcgtctgtgagacactaccgcgtacgcacgcacggaggcgttaggcgtacgcgt
ctagggcgcagtagtccagggttgcgtatgtcataacttacgcgtccatgcgt
cttccagtagtcttgcgtatgcgtacgcgttgcgtacgcgttgcgt
tcccttctacggtagcgcgtatgcgtccgcgttccggagcgggtgtgggt
gagcgcacagg

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

Table 6 (continued) Nucleotide sequence of p

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gcccccaagaacgccatagttgttgtcaagactgtggggcaacatctccgtccgcgttcttcttaccatcacggcgtg
gcctcccccgtAACATCTGATTACTACCGTACATCTCACAGCCACTACTGCACCGGGCAGCGGAGCGGAGCG
CACACAGAAAGCGACCGGATAGCAAGACTCTGACAAAGCCAAAGAAATCCACAGCGGAGCGAGCAGGAGGAGCG
CTCGTGTGGCGCCAAACGAACCGTATCGACCGCGAGCTAGAAACAGGATTTCCTACTGTATGCTATAATTCAACAGAGCAGGGG
CCAAGAACAGAGCTAAAACAGGTCCTGCGATCCCTCACCCGAGCTGCCGTATCACAAAGCGAAGATCAGCTCGCG
CACGCTGGAAGACGCCAGGGAGCTCTTCAGTAATAACTCGCGCGTACTTAAAGGACTAGTTTCGCGCCCTCTCAAATTAGCGCGAAA
ACTACGTATCTCCAGCGGCCACACCGCGCCAGCACCTGTCAGCGCCATTATGAGCAAGGAAATCCCACGCCATGTGGAG
TTACCGCCACAAATGGACTTGCGGTGGAGCTGCCAAGACTACTCAACCGAATAACTACATGAGCGGGGACCCACATGATATC
CGGGTCAACCGAACCTCGCGCCACCGAAACCGAATTCTTGGAACAGGGGTGATTACCGACACCTGTAATAACCTTAATCCCCTG
AGTTGGCCGCTGCCCTGGTGTACAGGAAAGTCCCCTCCACACTGTGTACTTCCAGAGACGCCAGGGCAAGTTCAGATGACT
AACTCAGGGCGCAGCTGCGGGCGCTTCGTACAGGGTGCCTGGCAGGGTATAACTCACCTGACAATCAGAGGGCGAG
GTATTCAACGAGAGTCGGTAGCTCTGCTTGGTCTCCGTCCGGACGGGACATTCTAGATCGCGGCCGCCGTCTTCATT
ACGCTCGTCAAGGCACTCTGAGACCTCGTCTCTGAGCCGCGCTGGAGGGCATTTGAAACTCTGCAATTATTGAGGAGTTGTG
CCATCGGTACTTAACTCCCTCTCGGGACCTCCGCCACTATCCGATCAATTCTCTAACTTGTACCGGTTAAAGGACTCGGGGAC
GGCTACACTGAATTTAGGGAGGGCAGAGCAACTGCCCTGAAACACCTGGTCCACTGTGCGCCACAAGTGTGCCCCGAC
TCCGGTGGAGTTGCTACTTGAATTGCCCAGGATCATATCAGGGGCCGGCACAGGGGACCTGTGTTCTACTGTGATTGCAACTGCTTAACC
GTAGCTGATTGGAGTTACCCAGCGCCCTGCTAGTTGAGCGGGACAGGGGACCTGTGTTCTACTGTGATTGCAACTGCTTAACC
TTGGATTACATCAAGATCTTGTGCCATCTGTGTGAGTTAAATAACTAGAAATTAAATACTGGGCTCTATGCCATCTGTAAAC
GCCACCGTCTCACCGGCCAAAGCAACCAAGCGAACCTTACCTGGTACTTTAACATCTCCCTCTGATTACAACAGTTCAACCCAG
ACGGAGTGTACTCGAGAGAACCTCTCGAGCTCAGTACTCCATCAGAAAAAACACCACCCCTTACCTGCCGGGAACGTACGAGTG
CGTCACCGGCCGCTGCACCAACCTACCGCTGACCGTAAACCAGACTTTCCGGACAGACCTCAATAACTCTGTTTACCGAGAG
GTGAGCTAGAAACCTTGGTATTAGGCTAGGCAAAAGGCGCAGCTACTGGGGTTATGACAATTCAAGCAACTCTACGGGTACTTAATT
CAGGTTCTCTGAGATGGACGGAATTACAGAGCAGCGCCCTGCTAGAAAGACGCGAGGGCAGGGCAGGGCAGCAACAGCGCATGATCA
AGAGCTCCAAGACATGGTAAACTGTCACCAGTGCAGGAAAGGGTACTTTGCTGGTAAAGCAGGCCAAAGTCACCTACGACAGTAATCCA
CCGGACACCGCCCTAGCTACAAGTGCACCAAGCGTCAAGAAATTGGTGGTATGGGGAGAAAAGGCCATTACCTACGACTC
GGTAGAAACCGAAGGCTGCATCACTCACCTGTCAAGGACCTGAGGACTCTGACCCCTTATAAGACCCCTGTGCGGTCTCAAAGATCTT
CCCTTAACTAAACCAAGTCAAACATAAAGCATACTTAACCTGAGGACTCTGACCCCTTATAAGACCCCTGTGCGGTCTCAAAGATCTT
TCCAGCTGGTATTGCACTGCTCTCTGGTGCACAAACTTCTCCACAACTCTAAATGGAATGTCAGTTCTCTGTCCATCGCACCC
ACTATCTCATGTGTGAGATGAAGCGCGCAAGACCGTCTGAAGGACATCTCAACCCCTGTATCCATGACACGGAAACCGGTCTCCA
ACTGTGCTTTCTACTCTCCCTTGTATCCCCAATGGGTTCAAGAGAGTCCCCCTGGGTACTCTTGTGCGCTATCGAACCTCTGAGTAA
CTTCAATGGCATGCTGCGCTCAAATGGCAACCGGCCTCTGTGGACAGGGCCGGCACCTACCTCCAAAGTGAACCTGTGAG
CCACCTCTCAAAACCAAGTCAAACATAAACCTGGAAATCTGCACCCCTCACAGTTACCTCAGAAGGCCCTAACTGTGGCGGCC
GCACCTCTAATGGCGGGCAACACACTCACCAGCAATCACAGGGCCCGCTAACCGTGCACACTCCAAACTTAGCATTGCGCACCCAA
GGACCCCTCACAGTGTCAAGAGGAAAGCTAGCCCTGCAAAACATCAGGGCCCGCTAACCGTGCACACTCCAAACTTAGCATTGCGGCC
CACCCCTCTAACTACTGCCACTGGTAGCTGGCATTGACTGAGGAGGCCATTACACAAAGTGAACAGACGCCCTAACTCTGAGTACGGG
GTCCTTGTGATGTCACAGACGACCTAAACACTTGTACCGCTGAGCTGAAACTGTGTCAGGGTGTGACTTAAATAACTCTGAGTACGGG
TGGAGCCTGGTTTGTGATGTCACAGACGACCTAAACACTTAAGACTAGGACAGGGCCCTTTTATAACTCAGGCCACAAACTTGGATTAAC
GTAGTTACCGTTGATGTCACAGCTCAACAACTTCAACATTCAACAAAGCTTGGTAAACCTAAGCAGCTGCAAGGGGTGATGTTGACGCTACAG
AACAAAGGCCCTTACTGTGAGTACAGCTCAACAACTTCAACAAAGCTTGGTAAACCTAAGCAGCTGCAAGGGGTGATGTTGACGCTACAG
CCATAGCCATTATGCAAGGAGATGGCTGAATTGGTCACCTAATGCAACCAACACATCCCTCAAACAAACACAAATGGCCATGGCTA
GAATTGATTCAACAAAGGCTATGGTCCTAAACTAGGAACACTGGCTAGTTGACAGCAGCACAGGTGCTTACAGTAGGAAACAGACGCCCTAATCTGAGT
GATAAGCTAACCTTGTGGACACACCAGCTCATCTCTAACACTGTAGACTAAATGCAAGAGAAAGATGCTAAACTCAGGCCACAAACTTGGATTAAC
GTGGCAGTCAACATACTGTGACAGTTTCAGTTGGCTTAAAGCAGTTGGCTCAATCTGGAACAGTTCAAG
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Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

Table 6 (continued) Nucleotide sequence of pAd/CMV/V5-DEST (SEQ ID NO: 83).

gtggcgccttctcaatgctcacgcttaggtatctcagttcggttaggtcgccgtccaagctgggctgtgcacgaacccccccgtcag
cccgaccgcgtgcgccttatccggtaactatcgcttgagtccaaacccggtaagacacgacttacgcgcactggcagcagccactggtaaca
ggattagcagagcgaggatgttaggcggctacagagttctgaagtggtggcctaactacggctacactagaaggacagtatttgtatc
tgcgcctctgtgaagccagtatccggaaaaagagttggtagcttgatccggcaaacaacccaccgctgttagcgggttttttgtt
gcaaggcagcagattacgcgcagaaaaaaaaggatctcaagaagatccttgatcttctacgggctgacgctcagtgaaacgaaaactc
acgtaagggatttgtcatgagattatcaaaaaggatcttcacctagatcctttaaatcaatctaaagtatataatgagtaacttgtctgaca
gttaccaatgcttaatcagtgaggcacatatcagcgtctattcgttcatccatagttgcctgactccccctgttagataactacga
tacgggagggcttaccatctggccccagtgctgcaatgataccgcgagacccacgctaccggctccagattatcagcaataaaccagc
cagccggaaagggccagcgcagaagtggcctgcaacttatccgcctccatccagctattatgtgcggaaagctagagaagttagt
tcgcccagttaatagttgcgaacgttgtgcattgtgcaggcatcgttgtcacgcgtcgtctttgtatgcctcattcagctccggittc
ccaacgatcaaggcgagttacatgatccccatgtgtcaaaaaagcggtagctccctcgcgtccgatcgtgtcagaagtaagtggc
cgcagtgttatcactcatggtatggcagcactgcataattcttactgtcatccgtaaagatgtttctgtgacttgtgagttactcaac
caagtcttgcagaatagtgtatgcggcgaccgagttgccttgcggcgtcaacacggataataccgcgccacatagcagaactttaa
aagtgcctcatattggaaaacgttctcgggcggaaaactctcaaggatcttaccgcgttgagatccagttgcgtatgtaaacccactcgac
ccaactgatctcgcgcattttacttccacccaggcggttgcggtagcaaaaaacaggaaggcaaaatgcgcaaaaaagggataaggc
gacacggaaatgtgaataactcatactctccctttcaatatttgaagcatttgcgttgcgtatgcggatacatattgaatgtat
tttagaaaaataaacaataggggtccgcgcacattccccggaaaagtgcgcacgtcaagaaaccattattatcatgacattaaacctat
aaaaataggcgtatcagcaggcccttcgttcaaggatccgaattccgggagagcgtcgatatcgcgtatgcggatttaaattaa

Please amend Table 7 on pages 354-362 as follows:

Table 7: Nucleotide sequence of pAd-GW-T0/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-T0/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-T0/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-T0/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-T0/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-T0/tRNA (SEQ ID NO: 84).

Table 7 (continued) Nucleotide sequence of pAd-GW-TO/tRNA (SEQ ID NO: 84).

Please amend Table 8 on pages 363-374 as follows:

Table 8: Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

1 catcatcaat aataaacctt attttggatt gaagccaata tgataatgag ggggtggagt
61 ttgtacgtg gcgcggggcg tggcacggg gcgggtgacg tagtagtgtg gcggaaagtgt
121 gatgttgcaa gtgtggcgg aacatgtaa gcacggatg tggcaaaaagt gacgttttg
181 gtgtgcgcg gtgtacacag gaagtgacaa ttgcgcgcg gttaggcg gatgttgtag
241 taaaatttggg cgttaaccggag taagatttg ccatttcgc gggaaaactg aataagagga
301 agtgaardtct gaataatttt gtgtactca tagcgcgtaa tatttgtcta ggccgcggg
361 gacttgcacc ttacgtgg agactcgccc aggtgtttt cttaggtt ttcgcgttc
421 cgggtcaaaag ttgcgtttt attattatag tcagtcgaag ctggatccg gtacctctag
481 aattctcgag cggccgctag cgacatcgat cacaagttt tacaaaaaaag caggctttaa
541 aggaaccaat tcagtcgact ctagaggatc gaaaccatcc tctgttatat ggccgcata
601 atttacttg aagacttagga ccctacagaa aagggtttt aaagtaggcg tgctaaacgt
661 cagcggacct gacccgtta agaattccaca aggtatccctg gtggaaatgc gcattttag
721 gctcaaatat ctgtatccct actaatttagg tgtggagagc ttccagccag ttctgttaggt
781 ttggagacca tttaggggtt ggcgtgttgc cccctcgtaa agtcttcgt acttcctaca
841 tcagacaagt ctgtcaattt gcaatatctc tttagccaa tatctaaatc tttaaaattt
901 tgattttgtt tttagccag gatgagagac attccagagt tgtagccctg taaaataaaa
961 caaatttaaa gatgtctgtg aaaagaaaaca tatattccctc atggaatat atccagggtt
1021 ttgaaggagg tacgaccccg agatctctat cactgtatagg gagactcgag ttagtgcgt
1081 gccgagtggt taaggcgatg gactctaaat ccattgggtt ctcccgccg aggttcgaat
1141 cctgcccact acggcgtgtct tttttactc tcgggttagag gaaatcccggt gcactaccct
1201 tgaatcaca cagaataaca tggagtagta cttttattt tcctgttatt atcttctcc
1261 ataaaaagtgg aaccagataa tttagttct ttgtgttaac aagacttagag attttttgaa
1321 gtgtacatt gaaaagcact tggaaacaca agtaatttct gacactgcta taaaatgt
1381 gaaaaaacgc tcaagtgtt ttgccttca gtctcttga aatgtgtct ccctatctga
1441 aatccagctc acgtctgact tccaaaaccg tgctgcctt taacttatgg aataaaatatc
1501 tcaaacagat cccccggcgca gctcgaattc gcccggccac tcgagatatc tagaccagg
1561 ttcttgatc aaagtggta tcgattcgac agatctgtg aatgtgtgg cgtggcttaa
1621 gggtggaaaa gaatataaa ggtgggggtc ttatgttagtt ttgtatctgt ttgcagcag
1681 ccccccgc catgagcacc aactcgtttg atgaaagcat tggagactca tatttgacaa
1741 cgccatgcc cccatggcc ggggtgcgtc agaatgtgt gggctccagc attgtggc
1801 gccccgtcct gcccgcacac tctactaccc tgacctacga gaccgtgtct ggaacggcgt
1861 tggagactgc agcctccgc gcccgttcag ccgtgcagc caccggccgc gggattgtga
1921 ctgactttgc ttccctgagg cccgttgcac gcagtgcagc ttccctgtca tccggccgc
1981 atgacaagtt gacggctt ttggcacaaat tggattctt gaccggggaa cttatgtc
2041 ttctcagca gctgtggat ctgcgcctc aggtttctgc cctgaaggct tcctccctc
2101 ccaatgcggg taaaacata aataaaaaac cagactctgt ttggatttg atcaagcaag
2161 tgccttgctg tcttttttgc ggggtttgc ggcgcggta ggccgggac cagcggtctc
2221 ggtcggtgag ggtcgtgtt atttttccca ggacgtggta aaggtgactc tggatgttca
2281 gatacatggg cataagcccg tctctgggtt ggaggtagca ccactgcaga gcttcatgt
2341 gccccgtgtt gttgttagatg atccagtcgt agcaggagcg ctggcggtt ggcctaaaaaa
2401 tgccttcag tagcaagctg attgccagg gcaaggccctt ggtgttaagt tttacaaagc
2461 ggttaagctg ggtatgggtgc atacgtgggg atatgagatg catctggac tggattttta
2521 ggttggctat gttccctccca atatccctcc gggattcat tggatgtcaga accaccagca

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

2581 cagtgtatcc ggtgcacttg ggaaatttgcatgttagctt agaaggaaat gcgttggaga
2641 acttggagac gcccttgta cctccaagat ttccatgca ttcgccata atgatggcaa
2701 tggcccacg ggccggccggc tggcgaaga tatttcggg atcactaacg tcatacgatgt
2761 gttccaggat gagatcgta taggccattt tacaagcg cggccggagg gtgccagact
2821 gccgtataat ggtccatcc gcccagggg cgtatgtacc ctacagatt tgcatcccc
2881 acgcttgcgg ttcagatggg gggatcatgt ctacctgcgg ggcgtatggaaaacggtt
2941 ccgggttagg ggagatcagg tggaaagaaa gcaggcttgc gacccatgc gacttaccgc
3001 agccgtggg cccgtaaatc acacctatta ccgggtgca ctgttagtta agagagctgc
3061 agctggcgtc atccctgagc agggggggca ctgcgttaag catgtccctg actcgcatgt
3121 ttccctgac caaatccgccc agaaggcgt cgccggccag cgatagcgt tcttgcagg
3181 aagcaaaatgt ttcaacgggt ttgagaccgt ccgcgttagg catgttttgc acgttttgc
3241 caagcagtcc caggcggtcc cacagctcgg tcacctgctc tacggcatct cgatccagca
3301 tatctccctcg ttgcgggt tggggccgtt tcgcgttac ggcgtatgc ggtgcgtc
3361 cagacgggccc agggcatgt ctgcgttgc ggcgtatgc gacccatgc tagtctgggt
3421 cacggtaag ggggtgcgtc cggcgtcgc gctggccagg gtgcgttgc ggctggcct
3481 gctgggtgt aagcgctgcc ggttcgttgc ctgcgtcgtc gccaggtagc atttgcatt
3541 ggtgtcatag tccagccctt ccgcggcgtg gcccggcgcc cgccgttgc cttggagga
3601 ggcggccac gaggggcagt gcagactttt gaggccgtag agctggcgccg cggaaatcac
3661 cgattccggg gagtggcat ccgcggccca ggcggccgtc acggctcgcg attccacgag
3721 ccaggtgagc tctggccgtt cggggtaaaa aaccagggtt ccccatgt tttgtatgc
3781 ttcttacctt ctggttcca tgagccgggt tccacgtcg gtgacgaaaa ggctgtccgt
3841 gtccccgtat acagacttgcg aaggccgtc ctgcgtcggt gtcgcgttgc cttccgtat
3901 tagaaactcg gaccactcg agacaaaggc tcgcgtccag gccagcacga aggaggctaa
3961 gtgggggggg tagcggtgt tgcgtactcg ggggtccact cgccgttgc gttgtggaaa
4021 catgtcgccc tcttcggcat caagggatgtt gattgggttgc taggtgttgc ccacgtgacc
4081 ggggtttctt gaaggggggcataaaaagggg ggtggggggcg cggtcggttgc cactcttc
4141 cgcacgtcg tctgcgtggg ccagctgttgc ggggtgtac tccctgtaa aagcggggcat
4201 gacttcgtcg ctaagattgtt cagttccaa aaacgaggag gattgtatgc tccatggcc
4261 cgcgggtatgc ctttgcggg tggccgtatc catgtgtca gaaaagacaa tttttgtt
4321 gtcaagcttg gtggccaaacg acccgtagag ggcgttggac agcaacttgc cgtggagcg
4381 cagggtttgg ttttgcgtc gatcgccgcg ctccgttgc ggcgttta gtcgtac
4441 ttgcgtcgca acgcaccggcc attcgggaaa gacgggtgt cgctcggttgc gacccagggt
4501 cacgcgcacaa ccgcgggtgt gcagggtgtac aaggtaacg ctgggtgttgc cttccgtcg
4561 taggcgtcg ttggccagc agaggccggcc gcccgtcg ggcgtatgt ggggtgggg
4621 gtctagctgc gtctcggttgc ggggggttgc gtccacgttgc aagacccgg gcaacggcg
4681 cgcgtcgaaatgtatgttgcgttgc ggcgttgc ggcgttgc ggcgttgc
4741 ggcaagcgccg cgtcgatgttgc ggttggatgg gggacccat ggcgttgc ggggtgg
4801 ggaggcgatgc atggcccaaa tgcgtaaatc gtagaggggc tctctgtat tccaaagata
4861 tgcgtatgttgc cgcgtcgatgttgc ggcgttgc ggcgttgc ggcgttgc
4921 gggaggcgagg aggtcggttgc acggccgggc tgctcggttgc ggcgttgc
4981 ctgcgtcgatgttgc agttggatgttgc tgcgttgc ggcgttgc ggcgttgc
5041 ggcgtcgatgttgc agacgttgc acggccgggc tgctcggttgc ggcgttgc
5101 gaccagctcg ggcgttgc acggccgggc tgctcggttgc tgcgttgc
5161 gtcataacttgc tccatggatgttgc ggcgttgc acggccgggc tgctcggttgc
5221 gtcgttgc acggccgggc tgctcggttgc tgcgttgc ggcgttgc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

5281 gtagaactgg ttgacggcct ggtaggcgca gcatccctt tctacggta gcgcgtatgc
5341 ctgcgcggcc ttccggagcg aggtgtgggt gagcgc当地 ggtccctga ccatgacttt
5401 gaggtactgg tatttgaagt cagtgtcgcc gcatccccc tgcgtccaga gaaaaaaagtc
5461 cgtgcgc当地 ttgaaacgcg gatttggcag ggcgaaggta acatcggtga agagtgatctt
5521 tcccgcgcga ggcataaaagt tgcgtgtat ggcggagggt cccggcacct cggAACgggt
5581 gttaaattacc tggggcgcga gcacgatctc gtcaaagccg ttgtatgttggccacaat
5641 gtaaaatcc aagaagcgcg ggatgc当地 gatggaaaggc aatttttaa gttcctcgta
5701 ggtgagctct tcaggggagc tgagccctg ctctgaaagg gcccaggctg caagatgagg
5761 gttggaaaggcg acgaatgagc tccacaggctc acggggcatt agcatttgca ggtggcgc当地
5821 aaagggtccta aactggcgac ctatggccat ttttctggg gtgtatgc当地 agaaggtaag
5881 cgggtctgt tccagcggt cccatccaag gttcgccgct aggtctcgcc cggcagtc当地
5941 tagaggctca tctccgc当地 acatcgatc cagcatgaag ggcacgagct gcttccaaa
6001 ggc当地ccatc caagtatagg tctctacatc gtaggtgaca aagagacgct cgggtgc当地
6061 atgcgagccg atcgggaaga actggatctc cggccaccaa ttggaggaggt ggctattgtat
6121 gtggtaaaag tagaagtccc tgcgacgggccc cgaacactcg tgctggctt tgtaaaaacg
6181 tgc当地cgtac tggcagcggt gcacgggctg tacatccctg acgagggtga cctgacgacc
6241 ggc当地acaagg aagcagagtg ggaatttgg cccctcgcc ggc当地gggttgg
6301 ttctacttcg gtc当地tgc当地 ctggc当地tgc当地 tggctgtc当地 aggggagtt
6361 gaccaccacg cggcgc当地gac ccaaagtc当地 gatgtccgcc cggccggc当地 ggagctt
6421 gacaacatcg cgc当地atggg agctgtccat ggtctggagc tcccgccggc当地 tcagg
6481 cgggagctcc tgc当地gggtta cctcgcatag acgggtcagg ggc当地gggcta gatccagg
6541 atacctaatt tccaggggct ggttgggccc ggc当地tgc当地 gcttgc当地
6601 cc当地ggc当地gactacgggtac cgc当地ggc当地 gggtgggccc ggggggggt
6661 tgc当地taaa agc当地gtgacg cggc当地gagcc cccggaggta gggggggctc
6721 gggagagggg cagggggcac tgc当地ggc当地 cgc当地gggca ggagctgg
6781 aggttgc当地gg cgaacgc当地gac gacgc当地ggg ttgtatcc
6841 aagacgacgg gccc当地ggtagt ctggagcc
6901 tgc当地tacgg cggcc当地ggc当地
6961 atctggcc
7021 acggggccgg cgagg
7081 ccctcg
7141 ac
7201 a
7261 c
7321 t
7381 a
7441 t
7501 g
7561 a
7621 c
7681 g
7741 a
7801 c
7861 t
7921 a

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

7981 atgccccagg cttcgtttg acatcgccgc aggtcttgtt agtagtcttg catgagcctt
8041 tctaccggca cttcttc tcccttc tgcctgc tgcctgc tgcctgc
8101 gcggccggcg agttggccg taggtggcg cctcttc ccatgcgtgt gaccccgaag
8161 cccctcatcg gctgaagcag ggcttaggtcg gcgacaacgc gctcggctaa tatggcctgc
8221 tgcacctcg tgagggtaga ctgaaagtca tccatgtcca caaagcggtg gtatgcgc
8281 gtgttgc tgc
8341 tgcgagagct cgggtacact gagacgcgag taagccctcg agtcaaatac gtagtcgtt
8401 caagtccgca ccaggtactg gtatcccacc aaaaagtgcg gcggccgcgcg gcggttagagg
8461 ggccagcgta gggccggccgg ggctccgggg gcgagatctt ccaacataag gcgatgat
8521 ccgttagatgt acctggacat ccaggtgtatgc cggccggccgg tggccggaggc gcgcggaaag
8581 tcgcgcacgc ggttccagat gttgcgcagc ggcaaaaagt gctccatgtt cggacgc
8641 tggccggta ggcgcgcgc atcggtacgc ctctagaccg tgcaaaaaggag gagcctgtaa
8701 gcgggcactc ttccgtggtc tgggtggataattcgcaagg gtatcatggc ggacgaccgg
8761 ggttcgagcc ccgtatccgg ccgtccggcc tgcgttgc ggttaccgc cgcgtgtcg
8821 acccaggtgt gcgcacgtc acaacgggg agtgcctt tggccctt tccaggcg
8881 gcggctgcgcg cgcgttgc tttggccact ggccgcgcgc agegttaagcg gttaggctgg
8941 aaagcgaaag cattaagtgg ctcgcctt gtagccggag ggttattttc caagggttga
9001 gtcgcgggac ccccggttcg agtctcgac cggccggact gcccgcgaacgg ggggtttgcc
9061 tccccgtcat gcaagacccc gcttgcataat tccctccggaa acagggacga gccccctttt
9121 tgctttccca agatgcaccc ggtgcgcgg cagatgcgc cccctccca gcaagcgca
9181 gagcaagagc agcggcagac atgcaggcgc ccctccctc ctctaccgc gtcaggagg
9241 gcgcacatccg cggttgcacgc ggcagcagat ggtgattacgc aaccccccgcg gcccgggg
9301 cggcactacc tggacttggc ggagggcgag ggcctggcgc ggcttaggagc gcccctcc
9361 gagcggtacc caagggtgc gctgaagcgt gatacgcgtg aggctacgt gcccgc
9421 aacctgttgc ggcacgcga gggagaggag cccgaggaga tgcggatcga aagttcac
9481 gcaggcgcg agtgcggca tggctgaat cgcgacgcgt tgctgcgcga ggaggactt
9541 gagccgcacgc cgcgaaccgg gattagtcgc ggcgcgcac acgtggcgcc cggccac
9601 gtaaccgcac acgagcagac ggtgaaccag gagattaact ttcaaaaaag cttaacaac
9661 cacgtgcgttgc cgcgcggagg gttggctatag gactgtatgc tctgtggac
9721 ttgttaagcg cgctggagca aaacccaaat agcaagccgc tcatggcgc gctgtcc
9781 atagtgcgc acacgaggca caacgaggca ttcaaggatgc cgctgcataa catacg
9841 cccgaggggcc gctggctgcgt cgatttgata aacatccgc agagcatagt ggtgcagg
9901 cgcagcttgc gctggcttgc caaggtggcc gccatcaact attccatgt tagcctggc
9961 aagtttacg cccgcacat ataccatacc cttacgttc ccatagacaa ggaggtaaag
10021 atcgagggggt tctacatgcg catggcgctg aagggttgcata ctttgcgcgac cggcc
10081 gtttatgcgca acgagcgcac ccacaaggcc gttggcgatgc ggcggccggc cggatc
10141 gaccgcgcgc tgcgcacag cctgcataagg gcccggcgc gacggccag cggcgataga
10201 gaggccgatgt cttacttgc cgcggccgcgt gacccgcgt gggcccaag cgcgcgc
10261 ctggaggcgatgt ctggggccgg acctggcgatgc ggggtggcgc cggccgcgc tggcaac
10321 ggcggcgatgttgg aggaatatgc cggaggacat ggttgcgc gaggacgg cggatc
10381 gcggtatgttgc gatgtgcac agtgcacgc cccggcgatgc gggccggc
10441 tgcagacccgc cccgtccggc cttacttgc cggacgcgt ggcgcaggatgc atggac
10501 tcatgtgcgt gactgcgcgc aatccgcac ctttgcgc gcaagccgc gccaaccggc
10561 tctccgcataat tcttgcgc gttggccgg cgcgcgc gggccacgcac gagaaggatgc
10621 tggcgatgcgtt aaacgcgcgtt ggcgcacatccg gcccgcac ggcggcc
10621 tggcgatgcgtt aaacgcgcgtt ggcgcacatccg gcccgcac ggcggcc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

10681 tctacgacgc gctgcttcag cgcgtggcgt gttacaacag cgccaacgtg cagaccaacc
10741 tggaccggct ggtggggat gtgcgcgagg ccgtggcgca gcgtgagcgc gcgcagcagc
10801 agggcaacct gggctccatg gttgcactaa acgccttcct gagtacacag cccgccaacg
10861 tgccgcgggg acaggaggac tacaccaact ttgtgagcgc actgcggcta atggtgactg
10921 agacaccgca aagtgggtt taccgtctg ggccagacta tttttccag accagtagac
10981 aaggcctgca gaccgttaaac ctgagccagg ctttcaaaaaa ctggcagggg ctgtgggggg
11041 tgcgggctcc cacaggcgac cgcgcgaccg tgtctagctt gtcgacgccc aactcgcc
11101 tggctgctgct gctaatacgcc cccttcacgg acagtggcag cgtgtcccg gacacatacc
11161 taggtcactt gtcgacactg taccgcgagg ccataaggta ggcgcattgtg gacgagcata
11221 cttccagga gattacaagt gtcagccgcg cgctgggca ggaggacacg ggcagcctgg
11281 aggcaaccct aaactacctg ctgaccaacc ggcggcagaa gatcccctcg ttgcacagtt
11341 taaacagcga ggaggagcgc attttgcgct acgtgcagca gagcgtgagc cttAACCTGA
11401 tgcgcgacgg ggttaacgcggc agcgtggcgc tggacatgac cgcgcgcaac atggAACCGG
11461 gcatgtatgc ctcaaaccgg cggttatca accgcctaat ggactacttg catcgccgg
11521 cgcgcgtgaa cccccgatgtt ttcaccaatg ccatttgcgaa cccgcactgg ctaccggccc
11581 ctgggttcta caccggggga ttgcagggtc cggagggtaa cgtatggattc ctctgggacg
11641 acatagacga cagcgtgttt tcccccgcac cgcagaccct gctagagttt caacagcgcg
11701 agcaggcaga ggcggcgcgtg cgaaaggaaa gcttccgcag gccaaggcgc ttgtccgatc
11761 taggcgctgc ggccccggc tcagatgta gtggccatt tccaagcttg atagggtctc
11821 ttaccagcac tcgcaccacc cgcccgccgc tgctggcga ggaggagttt ctaaacaact
11881 cgctgctgca gcccgcgcgca gaaaaaaacc tgcctccggc atttcccaac aacgggatag
11941 aggccttagt ggacaagatg agtagatgaa agacgtacgc gcaggagcac agggacgtgc
12001 caggcccgccg cccgcccacc cgtcgtaaa ggcacgaccg tcagcgggggt ctgggtgg
12061 aggacgatga ctggcagac gacagcagcg tcctggattt gggaggagttt ggcaaccgt
12121 ttgcgcacct tcgccccagg ctggggagaa tgtttaaaa aaaaaaaaaaagc atgatgcaaa
12181 ataaaaaaaaact caccaaggcc atggcaccga gcgttgtttt tcttgtattc cccttagtat
12241 gccgcgcgcg gcgatgtatg aggaagggtcc tcctccctcc tacgagagtg tgggtgagcgc
12301 ggcgccatgt gcggcggcgc tgggttctcc ctgcgtatgc cccctggacc cggccgttgt
12361 gcctccgcgg tacctgcggc ctaccggggg gagaacacgc atccgttact ctgagttggc
12421 acccctattc gacaccaccc gtgtgtactt ggtggacaac aagtcaacgg atgtggcatc
12481 cctgaactac cagaacgcacc acagcaactt tctgaccacg gtcattcaaa acaatgacta
12541 cagcccgccgg gaggcaagca cacagaccat caatctgac gaccggcgc actggggcgg
12601 cgacctgaaa accatcctgc ataccaacat gccaatgtg aacgagttca tgtttaccaa
12661 taagtttaag ggcgggtga tgggtcgcg ctgcctact aaggacaatc aggtggagct
12721 gaaatacggag tgggtggagt tcacgctgcc cgaggcaac tactccgaga ccatgaccat
12781 agaccttagt aacaacgcga tcgtggagca ctactgaaa gtggcagac agaacgggggt
12841 tctggaaagc gacatcgggg taaagttga caccgcaccc ttcaactgg ggtttgcacc
12901 cgtcaactggt ctgtcatgc ctgggtata tacaacgaa gcctccatc cagacatcat
12961 ttgcgtgcca ggtatcgggg tggacttcc acacagccgc ctgagcaact tggggcat
13021 cgcgcggccgca accccctcc aggagggtt taggatcacc tacgatgatc tggagggtgg
13081 taacattccc gcactgttgg atgtggacgc ctaccaggcg agcttggaaatgacaccga
13141 acagggcggg ggtggcgcag gcccgcacaa cagcgtggc agcggcgcgg aagagaactc
13201 caacgcggca gcccggcaaa tgcagccgggt ggaggacatg aacgatcatg ccattcgcc
13261 cgacaccctt gccacacggg ctgaggagaa gcccgcgttag gcccgaagcag cggccgaagc
13321 tgccgcggcc gctgcgaac ccgagggtcga gaagcctcga aagaaaccgg tgatcaaacc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

13381 cctgacagag gacagcaaga aacgcagtta caacctaata agcaatgaca gcaccitcac
13441 ccagtaccgc agctggtacc ttgcatacaa ctacggcgcac cctcagaccg gaatccgctc
13501 atggaccctg ctgtcactc ctgacgtaac ctgcggctcg gagcaggct actggcggtt
13561 gccagacatg atgcaagacc ccgtgaccctt ccgcctccacg cgccagatca gcaactttcc
13621 ggtggtgggc gcccggactgt tgcccggtca ctccaagagc ttctacaacg accaggccgt
13681 ctactcccaa ctcatccgcc agtttacctc tctgacccac gtgttcaatc gccttcccga
13741 gaaccagatt ttggcgcgcc cgccagcccc caccatcacc accgtcagtg aaaacgttcc
13801 tgctctcaca gatcacggga cgctaccgct ggcacacagc atcggaggag tccagcgagt
13861 gaccattact gacgcccagac gcccacccctg cccctacgtt tacaaggccc tgggcatacg
13921 ctgcggcgcgc gtcctatcga gcccacccctt ttgagaacgc atgtccatcc ttatatcgcc
13981 cagcaataac acaggctggg gcctgcgcctt cccaaagcaag atgtttggcg gggccaagaa
14041 ggcgcgcac caacacccag tgcgcgtgcg cggcactac cgcgcgcctt gggcgcgcga
14101 caaacgcggc cgcactgggc gcaccaccgt cgatgacgcc atgcacgcgg tgggtggagga
14161 ggcgcgcac tacacgcccc cggcgcacc cgtatccaca gtggacgcgg ccattcagac
14221 cgtggcgcgc ggagcccgcc gctatgctaa aatgaagaga cggcggagggc gcgttagcact
14281 tcgcacccgc cggcggccac gcactggcgc ccaacgcgcg cggcggccccc tgcttaaccg
14341 cgcacgtcgc accggccgcac gggcggccat gggggccgc tgaaggctgg cggcgggtat
14401 tgtcaactgt ccccccaggt ccaggcgcacg agcggccgcgc gcagcagccg cggccattag
14461 tgctatgact cagggtcgca ggggcaacgt gtatttttttgc cgcgactcgg ttagcggccct
14521 ggcgcgtcccc gtgcgcaccc gccccccgcg caactagatt gcaagaaaaaaa actacttaga
14581 ctcgtactgt tgtatgtatc cagcggcggc ggcgcgcac gaaagctatgt ccaagcgcaa
14641 aatcaaagaa gagatgctcc aggtcatcgc gcccggatc tatggccccc cgaagaagaga
14701 agagcaggat tacaagcccc gaaagctaaa gcgggtcaaa aagaaaaaaga aagatgatga
14761 ttagtgcactt gacgacgagg ttgaaactgt gcacgcgtacc ggcgcgcggc gacgggtaca
14821 gtggaaaggt cgacgcgtaa aacgttttgcgacccggc accaccgttgc tcttacgc
14881 cggtagcgc tccacccgc cctacaagcg cgttatgtat gagggtgtacg ggcgcggagga
14941 cctgcgttgcg caggccaaacg agcgcctcgg ggagttgc tccggaaacgc ggcataagga
15001 catgcgtggcg ttggcgctgg acgaggggcaa cccaaacacctt agcctaaacgc cgttaacact
15061 gcagcagggt ctggccgcgc ttgcacccgtc cgaagaaaaag cggggctaa agcgcgagtc
15121 tggtagcttg gcacccaccgc tgcagctgtat ggtacccaaacgc cggcggcgtc ggcacatcaa
15181 cttggaaaaaa atgaccgtgg aacctggctt ggagcccgag gtccgcgtc ggcacatcaa
15241 gcaggtggcg cggggactgg gcgtgcacac cgtggacgtt cagataccacca ctaccatgt
15301 caccatgtt gccacccgcac cagagggcat ggagacacaa acgtccccgg ttgcctcgc
15361 ggtggcggat gccgcgggtgc aggccgtgc tgcggccgcg tccaaagaccc tcaacggaggt
15421 gcaaacggac ccgtggatgt ttgcgtttc agccccccgg cggccgcgcg gttcgaggaa
15481 gtacggcgcc gccagcgcgc tactgcccga atatgcctca catccttccatc ttgcgcctac
15541 cccggctat cgtggctaca cctaccggcc cagaagacga gcaactaccc gacgcgcac
15601 caccactggaa accccgcgcgc ggcgtcgcgc tcgcacccgc gtcgtggcccg cgattccgt
15661 ggcgcagggtg gctcgcgaag gaggcaggac cctgggtgc tccaaacagcgc gtcaccaccc
15721 cagcatcggtt taaaagccgg tctttgtgg tcttgcagat atggccctca ctgcgcgcct
15781 ccgtttcccg gtgcggggat tccggaggaaat gacaccgtt aggaggggca tggccggcca
15841 cggcctgacgc ggcggcatgc gtcgtgcgc ccacccggcgg cggcgcgcgt cgcaccgtcg
15901 catgcgcggc ggtatcctgc ccctccat tccactgtatc gccgcggcga ttggccgcgt
15961 gcccggaaatt gcatccgtgg ccttgcaggc gcagagacac tgataaaaaa caagttgtat
16021 gtggaaaaat caaaaataaaaa agtctggact ctcacgcgtc ctgggtccctg taactat

Table 8 (continued) Nucleotide sequence of pAdenOTAG tRNA (SEQ ID NO: 85).

16081 gtagaatgga agacatcaac ttgcgtctc tgcccccgac acacggctcg cgcccggttca
16141 tggaaactg gcaagatatac ggcaccagca atatgagcgg tggcccttc agctggggct
16201 cgctgtggag cggcataaa aattcggtt ccaccgttaa gaactatggc agcaaggcct
16261 ggaacagcag cacagccag atgctgaggg ataagttaa agagaaaaat ttccaacaaa
16321 aggtggtaga tggcctggcc tctggcatta gcgggggtgg ggacctggcc aaccaggcag
16381 tgccaaataa gattaacagt aagcttgatc ccccccctcc ctagaggag cctccaccgg
16441 ccgtggagac agtgttcca gagggcgtg gcgaaaaagcg tccgcgcccc gacaggaaag
16501 aaactcttgtt gacgcaata gacgagccctc ctcgtacga ggaggcacta aagaaggcc
16561 tgcccaccac cggccccatc gcgcccatgg ctaccggagt gctggccag cacacaccgg
16621 taacgctgga cctgcctccc cccggcaca cccagcagaa acctgtgtc ccaggcccc
16681 cggcggtgt tgtaaccgt ctagccgca cgtccctgca cgcgcgcgccc agcggtccgc
16741 gatcggtcgcc gcccgtagcc agtggcaact ggcggcac actgaacagc atcggtggc
16801 tgggggtgca atccctgaag cgccgacgat gctctgaat agctaactgt tcgtatgt
16861 gtcatgtatc cgtccatgtc gccggcagag gagctgtga gcccgcgc gcccgcittc
16921 caagatggct accccttgcga tgcgtccgcgtt acatcgccatct cggccagga
16981 cgcctcgag tacctgagcc cccggctggt gcagttgccc cgcgcaccc agacgtactt
17041 cagcctgaat aacaaggtaa gaaacccac ggtggcgctt acgcacgac tgaccacaga
17101 cgggtcccg cgttgcgc tgccgttcat ccctgtggac cgtgaggata ctgcgtactc
17161 gtacaaggcg cggtcaccc tagctgtggg tgataaccgt gtgcgtggaca tggctccac
17221 gtacttgcac atcccgccg tgctggacag gggccctact ttaagccct actctggcac
17281 tgcctacaac gccctggctc ccaagggtgc cccaaatcct tgcgtatggg atgaagctgc
17341 tactgtctt gaaataaacc tagaagaaga ggacgatgac aacgaagacg aagtagacga
17401 gcaagctgag cagaaaaaaaaa ctcacgtatt tggcaggcg cttattctg gtataaatat
17461 tacaaggag ggtattcaaa taggtgtcgaa aggtcaaaca cctaaatatg ccgataaaac
17521 atttcaacctt gAACCTCAAA taggagaatc tcagtggatc gaaactgaaa ttaatcatgc
17581 agctgggaga gtcctaaaaa agactacccc aatgaaacca tggatgggtt catatcaaa
17641 acccacaat gaaaatggag ggcaaggcat tcttgcataaag caacaaaatg gaaagctaga
17701 aagtcaagt gaaatgcaat ttctcaac tactgaggcg accgcagca atggataa
17761 ctgtacttcaat aaagtggat tgcgtatc agatgttagat atagaaaccc cagacactca
17821 tatttcttac atgcccacta ttaaggaagg taactcacga gaactaatgg gccaacaatc
17881 tatgccccac aggcttaattt acattgttt tagggacaat ttattggtc taatgttata
17941 caacagcacg ggtaatatgg gtgtctggc gggccaagca tcgcagtgtca atgtgttgc
18001 agatttgcac gacagaaaca cagagcttc ataccagttt ttgcgttgcgat ccattggta
18061 tagaaccagg tactttcttca tggatca ggctgttgc acgtatgtatc cagatgttag
18121 aattattgaa aatcatggaa ctgaagatga acttccaaat tactgtttc cactgggagg
18181 tgtgatataat acagagactc ttaccaaggt aaaacctaaa acaggcagg aaaaatggatg
18241 gggaaaaatg gtcacgaaat ttccgatataa aatgaaataa agagttgaa ataatttgc
18301 catggaaatc aatctaaatg ccaacctgtc gggccaatggcgttgc acatagcgct
18361 gtatttgcac gacaagctaa agtacagtcc ttccaaacgtaa aaaaattctg ataacccaaa
18421 cacctacgac tacatgaaca agcgagtggt ggctcccggtt tagtggact gtcacattaa
18481 cttggagca cgtggccccc ttgactatataa ggacacgtc aacccttta accaccaccg
18541 caatgctggc ctgcgttacc gtcgtatgtt gtcggcaat gtcgtatgt tgcccttca
18601 catccaggtt cctcagaatgt tcttgcataat taaaaacccctc ctctcctgc cggcgtatgt
18661 cacctacgac tggaaacttca ggaaggatgt taacatggttt ctgcagagct cccttagaaaa

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

18721 tgacctaagg gttgacggag ccagcattaa gtttgatagc atttgcctt acgccaccc
18781 cttccccatg gcccacaaca ccgcctccac gcttgaggcc atgccttagaa acgacaccaa
18841 cgaccagtc ttaacgact atctctccgc cgccaacatg ctctacccta taccggccaa
18901 cgctaccaac gtgcccataat ccataccctc cggcaactgg gcggcttcc gcggctggc
18961 cttcacgcgc cttaaagacta agggaaacccc atcactggc tcgggctacg acccttatta
19021 cacctactct ggctctatac cctaccta taggaacctt tacctcaacc acaccttaa
19081 gaaggtggcc attacccctt actcttcgt cagctggcct ggcaatgacc gcctgcttac
19141 ccccaacgag ttgaaattt agcgctcagt tgacggggag ggttacaacg ttgcccagt
19201 taacatgacc aaagactgg tccctggtaca aatgcctagct aactacaaca tggctacca
19261 gggctctat atccccaga gctacaagga ccgcatacgatc tcccttta gaaacttcca
19321 gcccatgagc cgtcagggtgg tggatgatac taaatacaag gactaccaac aggtggcat
19381 cctacaccaa cacaacaact ctggatttgt tggctaccc tggccacca tgcgcgaagg
19441 acaggccctac cctgcataact tccctatcc gcctataggc aagaccgcag ttgacagcat
19501 taccctggaaa aagtttctt gcgatcgac ccttggcgc atccattct ccagtaact
19561 tatgtccatg ggcgcactca cagacctggg cccaaaccc tctacgcac actccgc
19621 cgcgttagac atgactttt aggtggatcc catggacgag cccaccctt tttatgttt
19681 gtttgaagtc ttgtacgtgg tccgtgtca cggccgcac cggcggtca tcgaaaccgt
19741 gtacctgcgc acgccttct cggccggcaa cggccacaaca taaagaagca agcaacatca
19801 acaacagctg cggccatggg ctccagtgag caggaactga aagccattgt caaagatctt
19861 ggttgtggc catatttttt gggcacat gacaaggcgtt ttccaggcgtt ttttctcca
19921 cacaagctcg cctgcgccat agtcaatacg gccggcgcg agactggggg cgtacactgg
19981 atggcccttgc cttggaaaccc gcactaaaaa acatgtacc tctttgagcc ctttggctt
20041 tctgaccagc gactcaagca ggttaccag ttgttgtacg agtcaacttgc ggcgcgtac
20101 gccattgcgtt cttccccga cccgtgtata acgtggaaa agtccaccca aagcgatc
20161 gggcccaact cggccgcctg tggactattc tgctgcattt ttccacgc cttggcaac
20221 tggcccaaaa ctccatggta tcacaacccc accatgaacc ttattaccgg ggtacccaa
20281 tccatgcata acagccccca ggtacageccc accctgcgtc gcaaccaggaa acagcttac
20341 agttcctgg agcgcactc gcccacttc cgcagccaca gtgcgcagat taggagcgc
20401 acttctttt gtcaacttgaa aaacatgtaa aaataatgtt ctagagacac ttcaataaaa
20461 ggc当地atgtt ttttttgc cactctcggt tgattattt ccccccaccc tgcgtctgc
20521 gccgtttaaa aatcaaagggtt gttctgcgc gcatcgctat ggcgcactgg cagggacac
20581 ttgcgataact ggtgttttagt gctccactta aactcaggca caaccatccg cggcgtc
20641 gtgaagttt cactccacag gctgcgcacc atcacaacg cgttttagcag gtcggcgcc
20701 gatatcttga agtgcgttgtt gggccctccg ccctgcgcgc gcgagttgcg atacacagg
20761 ttgcagcact ggaacactat cagcgcggg tggcgcacgc tggccagcac gctctgtcg
20821 gagatcagat ccgcgtccag gtcctccgcg ttgtcaggc gcaacggagt caacttttgt
20881 agtcgcctt cccaaaagggtt cgcgtccca ggcttttgtt tgactcgca ccgtatggc
20941 atcaaaagggtt gaccgtgccccc ggtctggggg ttaggataca ggcgcctgcataaaaggc
21001 atctgcattaa aagccacccatg agccttgcg ctttcagaga agaacatgcc gcaagacttgc
21061 ccggaaaactt gattggccgg acaggccgcg tggcgcacgc agcaccctgc gtcgggttt
21121 gagatctgc cccatccgcg gccccacccgg ttcttcacgc tctggcctt gctagactgc
21181 tccttcagcg cgcgtccccc gtttcgcgtc gtcacatcca ttcaatcact gtcgcctta
21241 ttatcataa tgcttcgtg tagacactta agtcgcctt cgatcgc gcaagcgggtgc
21301 agccacaacg cgcagccgtt gggctgtga tgcttgagg tcacctctgc aaacgactgc
21361 aggtacgcctt gcaggaatcg cccatcatc gtcacaaagg tcttggcgtt ggtgaaggc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

21421 agctgcaacc cgccgtgctc ctgcgtcagc caggcttgc atacggccgc cagagcttcc
21481 actttgtcag gcagtagtt gaagttgcc tttagatgt tatccacgtg gtactgtcc
21541 atcagcgcgc ggcgcggc catgcccttc tcaccacgc acacgtcg cacactcagc
21601 gggtcatca cctgttaatttc actttccgct tcgctggct cttcccttc ctcttgcgtc
21661 cgcataccac ggcgcactgg gtcgtctca ttccggcc gcactgtcg citacccct
21721 ttggcatgt tgatttagcac cggtggttg ctgaaaccca ccattttag cgcacatct
21781 tcttttctt cctcgctgtc caccattacc tctggtgatg gcccggcgc gggcttggga
21841 gaaggccgct tcttttctt ctggccgca atggccaaat cgcgcgcga ggctcgatggc
21901 cgcgggctgg gtgtgcgcg caccagcgcg tcttgcgtat agtctccctc gtcctcgac
21961 tcgatacgcc gcctcatccg ctttttggg ggcgcgggg gggccggcgg cgacggggac
22021 ggggacgaca cgtccatcat ggttggggg cgtcgccgc acccgctcc ggcgtcgaaa
22081 gtggttcgc gtcgtccctc ttcccgactg gccatttctt ttcctatag gcagaaaaag
22141 atcatggagt cagtcgagaa gaaggacacgc ctaaccgcgc cctctgagtt cgccaccacc
22201 gcctccaccg atgcgcgcaa cgcgcctacc acctccccg tcgaggcacc cccgcgttag
22261 gaggaggaag tgattatcga gcaggaccca gttttgtaa gcaagacga cgaggaccgc
22321 tcagtaccaa cagaggataa aaagcaagac caggacaacg cagaggaaaaa cgaggaaaca
22381 gtcggccggg gggacgaaag gcatggcgac taccttagatg tggagacga cgtgtgttg
22441 aagcatctgc agcgccatgt cgccattatc tgcgacgcgt tgcaagacgc cagcgatgt
22501 cccctcgcca tagcgatgt cagcctgccc tacgaacgc acctattctc accgcgcgt
22561 ccccccaaac gccaagaaaaa cggcacatgc gagcccaacc cgcgcctaa cttctacccc
22621 gtatttgcgc tgccagaggt gcttgccacc tatcacatct tttccaaaaa ctgcaagata
22681 cccctatctt gccgtgccaa cccgcggcga gggacaacgc agctggccctt gggcaggggc
22741 gctgtcatac ctgatatcgc ctgcgtcaac gaagtgcacaa aatctttga gggcttgg
22801 cgcgcgaga agcgcgcggc aaacgcgtc caacagggaaa acagcgaaaaa tgaaagtac
22861 tctggagtgt tgggtgaaact cgaggggtac aacgcgcgc tagccgtact aaaacgcac
22921 atcgagggtca cccacttgc ctacccggca cttaaacctac cccccaagggt catgagcaca
22981 gtcatgagtg agctgatgt cgcgcgtcg cagccctgg agagggatgc aaatttgc
23041 gaacaaacag aggagggcct acccgcatgt ggccgcgac agctagcgcc ctggctcaa
23101 acgcgcgacgc ctggcgtact ggaggagcga cgcacaaactaa tgcgtggccgc agtgcgtt
23161 accgtggagc ttgagtgcgc acgcgggttc ttgcgtgacc cggagatgc ggcacatc
23221 gagaaacat tgcactacac ctttcgacag ggctacgtac gccaggcttgc caagatctc
23281 aacgtggagc tctgcacact ggtctcttac ctggaaattt tgcacgaaaaa ccccttggg
23341 caaaacgtgc ttcatccac gtcacaggc gaggccgcgc gcgcactacgt cccgcactgc
23401 gtttacttat ttctatgcta cacctggcag acggccatgg gcgttggca gcagtgcttgc
23461 gaggagtgcac acctcaagga gtcgcacaaa ctgtcaaaacgc aaaacttgc ggcacatgg
23521 acggccctca acgagcgctc cgtggccgcg caccctgggg acatcattt cccgcacgc
23581 ctgcattaaaa ccctgcaaca gggctgcca gacttcacca gtcacaaagcat gttgcagaac
23641 tttaggaact ttatcctaga gtcacgtcgatc atctggcccg ccacccgttgcacttcc
23701 agcgactttg tgccattaa gtacccgcgaa tgccctccgc cgctttgggg ccactgtac
23761 cttctgcagc tagccaaacta cttgccttac cactctgaca taatggaaaga cgtgagcggt
23821 gacggctac tggagtgcac ctgtcgctgc aacctatgcac ccccgacccg ctccctgg
23881 tgcaatttgcac agctgcacaa cggaaatgttca attatcggtt cctttggatgc gcaagggtccc
23941 tcgcctgacg aaaatgcgc ggcgcgggg ttggaaactca ctccgggctt gttgcacgtcg
24001 gcttacccctc gcaaatttgtt accttgaggac taccacgcac acgagattt gtttacgaa
24061 gaccaatccc gccgcacaa tgcggacgtt accgcctgcg tcattaccca gggccacatt

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

24121 cttggccaat tgcaagccat caacaaagcc cgccaagagt ttctgctacg aaagggacgg
24181 ggggttact tgacccccc gtccggcgag gagctcaacc caatcccccc gcccgcag
24241 cccttatcagc agcagccgcg gccccttgc tcccaggatg gcacccaaaa agaagctgca
24301 gctgcccgcc ccacccacgg acgaggagga atactgggac agtcaggcag aggaggttt
24361 ggacgaggag gaggaggaca ttagtggaga ctgggagac ctagacgagg aagcttccga
24421 ggtcgaagag gtgtcagacg aaacaccgtc accctcggtc gcattccct cgccggcgcc
24481 ccagaaatcg gcaaccgggtt ccagcatggc tacaacctcc gctcctcagg cgccgcggc
24541 actgcccgtt cgccgaccca accgttagatg ggacaccact ggaaccaggg cggtaagtc
24601 caagcagccg cccgcgttag cccaagagca acaacagcgc caaggctacc gtcatggcg
24661 cgggcacaag aacgccatag ttgcgttgc gcaagactgt gggggcaaca ttccttcgc
24721 ccggcgttt ctctctacc atcacgggtt ggcctccccc cgtaacatcc tgcattacta
24781 ccgtcatctc tacagcccat actgcacccgg cggcagcggc agcggcagca acagcagcgg
24841 ccacacagaa gcaaaggcga cccgatagca agactctgac aaagcccaag aaatccacag
24901 cggccgcagc agcaggagga ggacccgtgc gtctggcgcc caacgaaccc gtatcgaccc
24961 gcgagcttag aaacaggatt ttcccactc tttatgtat atttcaacag agcaggggc
25021 aagaacaaga gctgaaaata aaaaacagggt ctctgcgatc ctcacccgc agctgcctgt
25081 atcacaaaag cgaagatcg ctccggcga cgctggaga cggggaggct ctcttcgat
25141 aatactgcgc gctgactt aaggactgtt ttcggccct ttctcaaatt taagcgcgaa
25201 aactacgtca ttcacggcg ccacacccgg cggcagcacc tgcgtcagc gccattatga
25261 gcaaggaaat tccacgcggc tacatgtgga gttaccagcc acaaattggga ctgcggctg
25321 gagctgccc agactactca acccgaaataa actacatgag cggggaccc cacatgat
25381 cccgggtcaa cggaatccgc gcccacccgg accgaattct ttggaaacag gggctatta
25441 ccaccacacc tcgtataaac cttatcccc gtagttggcc cgcgtccctg gtgtaccagg
25501 aaagtccgc tccacccact gtggacttc ccagagacgc ccaggccgaa gttcagatga
25561 ctaactcagg ggcgcagctt cggggccggc ttgcgtacag ggtgcggcgc cccggcagg
25621 gtataactca cctgacaatc agagggcgag gtattcagct caacgcacgag tcggtgagct
25681 cctcgttgg tccctgtccg gacgggacat ttcatgcgg cggccgcggc cgtccttcatt
25741 tcacgcctcg tcaggcaatc ctaactctgc agacctcgac ctctgagccg cgcctggag
25801 gcattggAAC tctgcaattt attgaggagt ttgtgcacatc ggtctacttt aacccttct
25861 cgggacctcc cggccactat cggatcaat ttattcccaa ctttgacgcgc gtaaaggact
25921 cggccgcacgg ctacgactga atgttaagtg gagaggcaga gcaactgcgc ctgaaacacc
25981 tggccactg tcggccac aagtgcgtt cccgcgactc cggtgatgtt tgctacttt
26041 aattggccga gatcatatc gagggccgg cgcacggcgt cggcttacc gcccaggagg
26101 agcttgcgg tagcctgatt cgggagttt cccagcgcgg cctgcttagtt gagcgggaca
26161 ggggacccctg tttctctact gtgttgcac actgtctaa ctttggattt catcaagatc
26221 ttgttgcac tctctgtgtt ggttataata aatacagaaaa ttaaaatata ctggggctcc
26281 tatgcacatc ctgtaaacgc caccgtctc acccgccca gcaaaccatc gcaacccatc
26341 cctggactt ttaacatctc tccctctgtt atttacaaca gttcaaccc agacggagtg
26401 agtctacgag agaacccttc cggatctcgt tactccatca gaaaaaacac caccctcc
26461 acgtccggg aacgtacgg tgcgtcaccg gcccgtgcac cacacccatc gctgaccgt
26521 aaaccagact tttccggac agacctcaat aactctgtt accagaacag gaggtgagct
26581 tagaaaaaccc ttgggtatt aggccaaagg cgcagctact ttggggttt tgaacaattc
26641 aagcaactct acggcttatt ctaattcagg ttctctaga aatggacggaa attattacag
26701 agcagcgcct gctagaaaga cgcaggcag cggccgagca acagcgcacg aatcaagagc
26761 tccaaagacat ggttaacttg caccagtca aaagggttat ctttgcgtt gtaaaggcag

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (**SEQ ID NO: 85**).

26821 ccaaagtac ctacgacagt aataccaccg gacaccgcct tagctacaag ttgccaacc
26881 agcgtcagaa attggggc atggggag aaaaggccat taccataact cagcacctgg
26941 tagaaaccga aggctgcatt cactcacctt gtcaaggacc tgaggatctc tgcaccctta
27001 ttaagaccct gtgcggctc aaagatcta ttcccttaa ctaataaaaaaaa
27061 agcatcaatt acttaaaatc agtttagcaaa ttctgtcca gtttattcag cagcacctcc
27121 ttgccctct cccagctctg gtattgcagc ttccctctgg ctgcaaactt tctccacaat
27181 ctaaatggaa tgcgttgttc ctccgttcc tgcgttcccg cacccactat ctcatgttg
27241 ttgcagatga agcgcgcaag accgtctgaa gatacctca acccccgtta tccatatgac
27301 acggaaaccg gtccccaac tgcctttt ctactcctc cttttgtatc ccccaatggg
27361 ttcaagaga gtcggctgg ggtactctt ttgcgttat ccgaacctt agttaccc
27421 aatggcatgc ttgcgttcaa aatgggcac ggcctctc tggacgaggc cggcaacc
27481 acctccaaat atgtaaaccac tgcgttccaa aaccaagtc aaacataaaac
27541 ctggaaatat ctgcacccct cacagttacc tcagaagccc taacttgcc tgccgccc
27601 cctctaatttgc tcggggcaaa cacactcacc atgcaatcac agggcccgct aaccgtgcac
27661 gactccaaac ttagcattgc caccgaaggc cccctcacag tgcgttccaa
27721 ctgcaacat caggccccctt caccaccacc gatagcaga cccttactat cactgc
27781 cccctctaa ctactgcac tggtagctt ggcattgact tggaaagagcc catttata
27841 caaaatggaa aacttaggact aaagtacggg gctcccttgc atgtaaacaga cgaccc
27901 actttgaccg tagcaactgg tccagggtgtg actattaata atacttcctt gcaaaactaa
27961 gttactggag ccttgggtt tgattcaca ggcaatatgc aacitaatgt agcaggagga
28021 ctaaggattt attctcaaaa cagacgcctt atacttgatg ttagttatcc gtttgc
28081 caaaaccaac taaatctaag actaggacag gcccctttaataaactc agcccacaac
28141 ttggatatta actacaacaa aggcccttac ttgttacag ctccaaacaa ttccaaaaag
28201 cttgaggta acctaagcac tgcgggggg ttgtatgtt acgctacagc catagccatt
28261 aatgcaggag atgggttga atttgc tctaattgcac caaacacaaa tccctcaaa
28321 aaaaaattt gccatggctt agaatttgat tcaaacaagg ctatggttcc taaacttag
28381 actggccta gtttgacag cacagggtcc attacagtag gaaacaaaaaa taatgataag
28441 ctaacttgtt ggaccacacc agctccatct cctaactgt gactaaatgc agagaaagat
28501 gctaaactca cttgggtt aacaaaatgt ggcaactt tacttgctac agttc
28561 ttggctgtt aaggcagttt ggctccaata tctggaaacag ttcaaagtgc tcatttatt
28621 ataagatttgc acgaaaatgg agtgcacta aacaatttcc tccctggaccc agaatattgg
28681 aacttttagaa atggagatct tactgaaggc acagccata caaagctgt tggatttt
28741 cctaaccat cagttatcc aaaatctc acggggactt cccaaatgtt cattgtc
28801 caagttact taaacggaga caaaaactaaa cctgtacac taaccattac actaaacgg
28861 acacaggaaa caggagacac aactccaagt gcatactcta tgcattttc atggactgg
28921 tctggccaca actacattaa taaaatgtt gcccacatctt cttacactt ttcatatc
28981 gccaagaat aaagaatcgt ttgtttagt ttcaacgtg ttattttc aattgc
29041 aatttgcattt cattttcat tcagttatgc agccccacca ccacatagct tata
29101 accgtaccc taaatccac acggggactt agtattcaac ctggccaccc ccccaaca
29161 cacaggtac acagtcctt ccccccggctt gcccattttt aattgc
29221 agacatattt ttaggttgc tattccacac ggttccgtt cgagccaaac gtc
29281 gatatttata aactccccgg gcagctact taagttcatg tgcgttcc
29341 cacaggctgc tgcgttccactt gcccggctt aacggggccg
29401 catgggggtt gactcataat cgtgc
29461 aataaactgc tgcgttccactt gca
29521 aacatggc
29581 gtc
29641 aacatggc
29701 gtc
29761 aacatggc
29821 gtc
29881 aacatggc
29941 gtc
29981 aacatggc
30041 gtc
30101 aacatggc
30161 gtc
30221 aacatggc
30281 gtc
30341 aacatggc
30401 gtc
30461 aacatggc
30521 gtc
30581 aacatggc
30641 gtc
30701 aacatggc
30761 gtc
30821 aacatggc
30881 gtc
30941 aacatggc
31001 gtc
31061 aacatggc
31121 gtc
31181 aacatggc
31241 gtc
31301 aacatggc
31361 gtc
31421 aacatggc
31481 gtc
31541 aacatggc
31601 gtc
31661 aacatggc
31721 gtc
31781 aacatggc
31841 gtc
31901 aacatggc
31961 gtc
32021 aacatggc
32081 gtc
32141 aacatggc
32201 gtc
32261 aacatggc
32321 aacatggc
32381 gtc
32441 aacatggc
32501 gtc
32561 aacatggc
32621 aacatggc
32681 aacatggc
32741 aacatggc
32801 aacatggc
32861 aacatggc
32921 aacatggc
32981 aacatggc
33041 aacatggc
33101 aacatggc
33161 aacatggc
33221 aacatggc
33281 aacatggc
33341 aacatggc
33401 aacatggc
33461 aacatggc
33521 aacatggc
33581 aacatggc
33641 aacatggc
33701 aacatggc
33761 aacatggc
33821 aacatggc
33881 aacatggc
33941 aacatggc
34001 aacatggc
34061 aacatggc
34121 aacatggc
34181 aacatggc
34241 aacatggc
34301 aacatggc
34361 aacatggc
34421 aacatggc
34481 aacatggc
34541 aacatggc
34601 aacatggc
34661 aacatggc
34721 aacatggc
34781 aacatggc
34841 aacatggc
34901 aacatggc
34961 aacatggc
35021 aacatggc
35081 aacatggc
35141 aacatggc
35201 aacatggc
35261 aacatggc
35321 aacatggc
35381 aacatggc
35441 aacatggc
35501 aacatggc
35561 aacatggc
35621 aacatggc
35681 aacatggc
35741 aacatggc
35801 aacatggc
35861 aacatggc
35921 aacatggc
35981 aacatggc
36041 aacatggc
36101 aacatggc
36161 aacatggc
36221 aacatggc
36281 aacatggc
36341 aacatggc
36401 aacatggc
36461 aacatggc
36521 aacatggc
36581 aacatggc
36641 aacatggc
36701 aacatggc
36761 aacatggc
36821 aacatggc
36881 aacatggc
36941 aacatggc
37001 aacatggc
37061 aacatggc
37121 aacatggc
37181 aacatggc
37241 aacatggc
37301 aacatggc
37361 aacatggc
37421 aacatggc
37481 aacatggc
37541 aacatggc
37601 aacatggc
37661 aacatggc
37721 aacatggc
37781 aacatggc
37841 aacatggc
37901 aacatggc
37961 aacatggc
38021 aacatggc
38081 aacatggc
38141 aacatggc
38201 aacatggc
38261 aacatggc
38321 aacatggc
38381 aacatggc
38441 aacatggc
38501 aacatggc
38561 aacatggc
38621 aacatggc
38681 aacatggc
38741 aacatggc
38801 aacatggc
38861 aacatggc
38921 aacatggc
38981 aacatggc
39041 aacatggc
39101 aacatggc
39161 aacatggc
39221 aacatggc
39281 aacatggc
39341 aacatggc
39401 aacatggc
39461 aacatggc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

29521 agcgtatcgatt cgccaccgcggcc gcagcataag gcgccttgctc ctccgggcac agcagcgcac
29581 cctgatctca cttaaatcag cacagtaact gcagcacagc accacaatat tggtaaaat
29641 cccacagtgc aaggcgttgt atccaaagct catggcgggg accacagaac ccacgtggcc
29701 atcataccac aagcgcaggt agattaagtgc gcgacccttc ataaacacgc tggacataaa
29761 cattaccctt ttggcatgt tgtaattcac caccccccgg taccatataa acctctgatt
29821 aaacatggcg ccatccacca ccacccctaaa ccagctggcc aaaacctgcc cgccggctat
29881 acactgcagg gaaccgggac tggaacaatg acagtggaga gcccaggact cgtaccatg
29941 gatcatcatg ctcgtcatga tatcaatgtt ggcacaacac aggcacacgt gcataacactt
30001 cctcaggatt acaagctctt cccgcgttag aaccatatcc cagggaaacaa cccattctg
30061 aatcagcgta aatccccacac tgcaaaaaag acctcgcacg taactcaacgt tggcatgt
30121 caaagtgtta cattcggcga gcagcggatg atccctccatgt atggtagcgc gggttctgt
30181 ctcaaaagga ggttagacgt ccctactgtt cggagtgcgc cgagacaacc gagatcgtgt
30241 tggcgtatgt gtcatgcacca atggAACGCC ggacgtatgc atatttctg aagcaaaacc
30301 aggtgcgggc gtgacaaaca gatctgcgtc tccggctcg ccgccttagat cgctctgt
30361 agtagttgtt gtatatccac tctctcaaag catccaggcg cccctggct tcgggttctt
30421 tgtaaactcc ttcatgcgc gtcgcctga taacatccac caccgcagaa taagccacac
30481 ccagccaacc tacacattcg ttctgcgagt cacacacggg aggagcggga agagctggaa
30541 gaaccatgtt ttttttttta ttccaaaaga ttatccaaaaa cctcaaaatg aagatctatt
30601 aagtgaacgc gctccctcc ggtggcgtgg tcaaactcta cagccaaaga acagataatg
30661 gcattgtaa gatgtgcac aatggctcc aaaaggcaaa cggccctcac gtccaagtgg
30721 acgttaaaggc taaacccttc agggtaatc tcctctataa acattccagc accttcaacc
30781 atgccccaaat aattctcatc tcgccccctt ctaatataat ctcataagcaa atccccaaata
30841 ttaagccgg ccattgtaaa aatctgcgtcc agagcgcctt ccacccctcag cctcaagcag
30901 cgaatcatga ttgcaaaaat tcaggttctt cacagacctg tataagattc aaaagcggaa
30961 cattaaacaaa aataccgcga tcccgtaggt ccctcgcag ggccagctga acataatcgt
31021 gcaggctgc acggaccage gcccgcactt ccccgccagg aaccttgcaca aaagaaccca
31081 cactgattat gacacgcata ctcggagcta tgctaacccag cgtagccccg atgttaagtt
31141 tggcatgg cggcgtataaaatgcaag gtgtgcgtca aaaaatcagg caaagcctcg
31201 cggaaaaaaag aaagcacatc gtgtcatgc tcatgcagat aaaggcaggt aagctccgg
31261 accaccacag aaaaagacac cattttctc tcaaacatgt ctgggggtt ctgcataaac
31321 acaaaaataaa ataacaaaaa aacattttaa cattagaagc ctgtcttaca acaggaaaaaa
31381 caacccttat aagcataaga cggactacgg ccatgcgcgc gtgaccgtaa aaaaactgg
31441 caccgtgatt aaaaagcacc accgacagct ctcgggtcat gtccggagtc ataatgtaa
31501 actcggtaaa cacatcaggt tgtaatccat cggtcgtgc taaaaagcga ccgaaatagc
31561 cggggggat acataccgc aggcgttagag acaacattac agccccata ggaggatataa
31621 caaaaataat aggagagaaa aacacataaa cacctgaaaaa accctctgc ctggcaaaa
31681 tagcaccctc cccgtccaga acaacatatac ggcgttccac agcggcagcc ataacagtca
31741 gccttaccag taaaaaagaa aacattttaa aaaaacacca ctcgcacacgg caccagctca
31801 atcagtccaca gtgtaaaaaaa gggccaagtgc cagagcgagt atatataggc cttttttttt
31861 acgttaacggtaaaatgtccac aaaaaacacc cagaaaaaccg cacgcgaacc tacgcccaga
31921 aacgaaagcc aaaaacccca caacttccctc aaatcgtcac ttccgttttccacgttac
31981 tcacttccca ttttaagaaaa actacaattt ccaacacata caagttactc cggccctaaaa
32041 cctacgtcac cccggccgtt cccacggccc ggcgcacgtc acaaactcca cccctctt
32101 atcatattgg cttaatccaa aataaaggta tattattgtat gatgttaatt aattttaaatc
32161 cgcgtacgtatc gggccgtt cccggccgtt cggatcgtcgc acgcgaggct ggatggcc

Table 8 (continued) Nucleotide sequence of pAdenoTAG tRNA (SEQ ID NO: 85).

32221 ccccattatg attcttctcg ctccggcg catcggtatg cccgcgttgc aggccatgt
32281 gtccaggcgag gtatgtacg accatcaggg acagctcac ggccagaaa aggccaggaa
32341 ccgtaaaaag gccgcgttgc tggcgtttt ccataggctc cggccccctg acgagcatca
32401 caaaaatcg a cgctcaagtc agaggtggcg aaacccgaca ggactataaa gataccaggc
32461 gtttccccctt ggaagctccc tcgtgcgtc tcctgttccg accctgcgc ttaccggata
32521 cctgtccgccc ttctccctt cgggaagcgt ggcgcgttctt caatgtcac gctgttagta
32581 tctcagttcg gtgttaggtcg ttgcgtccaa gctggctgt gtgcacgaac ccccccgttca
32641 gcccgaccgc tgccgccttat ccggtaacta tcgtctttag tccaacccgg taagacacga
32701 cttatcgcca ctggcagcag ccactggtaa caggattagc agagcgaggt atgttaggcgg
32761 tgctacagag ttcttgaagt ggtggctaa ctacggctac actagaagga cagtatttgg
32821 tatctgcgtc ctgctgaagc cagttacccctt cggaaaaaaga gtggtagct ctgtatccgg
32881 caaacaacc accgctggta gcgggtggttt ttgtttgc aagcagcaga ttacgcgcag
32941 aaaaaaaagga tctcaagaag atcccttgat ctttctacg gggctgtacg ctcagtggaa
33001 cgaaaaactca cgttaaggga ttttgtcat gagattatca aaaaggatct tcaccttagat
33061 ccttttaaat caatcttaaag tatatatgaa taaacttggt ctgacagttt ccaatgctta
33121 atcagtggagg cacctatctc a cgcgttcatgt ctatccgtt catccatagt tgctgtactc
33181 cccgtcggtg agataactac gatacgggag ggcttaccat ctggcccccag tgctgcaatg
33241 ataccgcgag acccacgtc accggctcca gatttacg caataaaacca gccagccgga
33301 agggccgagc gcagaagtgg tcctgcaact ttatccgcctt ccatccagtc tattaattgt
33361 tgccggaaag ctagagtaag tagttcgcca gttaatagt tgccaaacgt tggtgccatt
33421 gntgcaggca tcgtgggtgc acgctcggtcg ttggatgg ttccatttcg ctccgggttcc
33481 caacgatcaa ggcgagttac atgatcccccc atgttgca aaaaagcgggt tagctccctt
33541 ggtccctccga tcgttgcag aagtaaggta ggcgcgtgt tatcactcat ggttatggca
33601 gcactgcata attcttttac tgtcatgcca tccgttaagat gctttctgt gactggtag
33661 tactcaacca agtcattctg agaatagtgt atgcggcgac cgagttgtc ttggccggcg
33721 tcaacacggg ataataccgc gcccacatagc agaacttaa aagtgcgtat cattggaaaa
33781 cgttcttcgg ggcgaaaaact ctcaggatc ttaccgtgt tgagatccag ttgcgtttaa
33841 cccactcggtg caccctaaactg atcttcagca tctttactt tcaccagcgt ttctgggttga
33901 gcaaaaaacag gaaggcaaaa tgccgaaaaa aagggaaataa gggcgacacg gaaatgttga
33961 atactcatac tcttccttt tcaatattat tgaagcattt atcagggttta ttgtctcatg
34021 agcggatatac tattttaatg tatttagaaaa aataaaacaaa taggggttcc ggcacacattt
34081 ccccgaaaaag tgccacccgtt cgtctaagaa accatttata tcatgacatt aacctataaa
34141 aataggcgta tcacgaggcc ctccgttcaaggatccg aattcccgaa agagctcgat
34201 atcgcgtcg gatttaattt aattaa

Please amend Table 9 on page 375 as follows:

Table 9: Nucleotide sequence of a Sau3A fragment used to construct vectors comprising suppressor tRNA sequences (SEQ ID NO: 86).

```
1 ctagaggatc gaaaccatcc tctgctatat ggccgcataat attttacttg aagacttagga
61 ccctacagaa aaggggtttt aaagttaggcg tgcttaaacgt cagcggaccc gaccgggtgt
121 agaatccaca aggtatcccg gtggaaatgc gcatttttag gcttcaataat ctgttaatcct
181 actaattttagg tgtggagagc tttagccag tttaggtttaggt ttggagacca tttaggggtt
241 ggcgtgtggc cccctcgtaa agtcttcgt acttcctaca tcagacaagt cttgcaattt
301 gcaatataatc tttagccaa tatctaaatc tttaaaatattt tgatttgtt tttaaccag
361 gatgagagac attccagatg tgttaccttg tcaaaaataaa caaatttaaa gatgtctgt
421 aaaagaaaaca tatattccctc atggaaatat atccaggtt tgaaaggagg tacactcgag
481 tctccctatc agtgatagag atctcgaggt cgtagtcgtg gccgagtggg taaggcgatg
541 gactctaaat ccattgggtt ctccccgcgc aggttcaat cctgccgact acggcggt
601 tttttactc tcgggttagag gaaatccggc gcactacccgt tgcaatcaca cagaataaca
661 tggagtagta ctttttattt tcctgttattt atctttctcc ataaaaagtgg aaccagataa
721 tttagttct tttgtgttaac aagacttagag atttttgaa gtgttacatt ggaaagcact
781 tgaaaaacaca agtaatttct gacactgcta taaaaatgtat ggaaaaacgc tcaagttgtt
841 ttgccttca gtcttcttga aatgctgtct ccctatctga aatccagctc acgtctgact
901 tccaaaacccg tgcttgcctt taacttatgg aataaaatatc tcaaacagat cccc
```

Please amend Table 10 on pages 376-384 as follows:

Table 10: Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

CATCATCAATAATACCTTATTTGGATTGAAGCCAATATGATAATGAGGGGGTGGAGTTGTGACGTG
GCGCGGGCGTGGAACGGGGCGGGTACGTAGTAGTGTGGCGAAGTGTGATGTTGCAAGTGTGGCGGA
ACACATGTAAGCAGCGATGTGGCAAAAGTGACGTTTGGTGTGCGCCGGTACACAGGAAGTGACAA
TTTCGCGCGGTTTAGGCAGTGTTAGTAATTTGGCGTAACCGAGTAAGATTGGCCATTTCGC
GGGAAAAGTGAATAAGAGGAAGTGAAATCTGAATAATTGTGTTACTCATAGCGCGTAATATTGTCTA
GGGCCGCGGGACTTGACCGTTACGTGGAGACTCGCCCAGGTGTTTCTCAGGTGTTCCCGCGTTC
CGGGTCAAAGTTGGCGTTTATTATTAGTCAGTCAAAGCTGGATCCGGTACCTCTAGAATTCTCGAG
CGGCCGCTAGCGACATCGATCACAAGTTGACAAAAAGCTGAACGAGAACAGTAAATGATATAAATA
TCAATATATAATTAGATTTCGATAAAAAACAGACTACATAACTGTAAAACACAACATATCCAGTC
ACTATGGCGCCGCATTAGGCACCCAGGTTACACTTATGCTTCCGGCTCGTATAATGTGTGGATT
TGAGTTAGGATCCGGCGAGATTTCAAGGAGCTAAGGAAGCTAAATGGAGAAAAAAACTGGATATAC
CACCGTTGATATATCCAATGGCATCGTAAAGAACATTGAGGCATTCAGTCAGTTGCTCAATGTACC
TATAACCAGACCGTTAGCTGGATATTACGGCTTTAAAGACCGTAAAGAAAAATAAGCACAAGTTT
ATCCGGCCTTATTACACATTCTGCCCCGCTGATGAATGCTCATCCGGAAATCCGTATGGCAATGAAAGA
CGGTGAGCTGGTATGGATAGTGTTCACCCCTGTTACACGGTTCCATGAGCAAACACTGAAACGTT
TCATCGCTCTGGAGTGAATACACGACGATTCCGGCAGTTCTACACATATATCGCAAGATGTGGCGT
GTTACGGTGAAAACCTGGCTATTCCCTAAAGGTTATTGAGAATATGTTTCTCAGGCCATCC
CTGGGTGAGTTTACCCAGTTGATTAAACGTGGCCAATATGGACAACCTCTCGCCCCGTTTCACC
ATGGGAAATATTACCGCAAGGGCACAAGGTGCTGATGCCGCTGGCGATTCAAGGTTCATGCCGTCT
GTGATGGCTCCATGTCGGCAGAATGCTTAATGAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGC
GTAACACGCGTGGATCCGGCTTACTAAAAGCCAGATAACAGTATGCGTATTGCGCGCTGATTTTGC
ATAAGAAATATACTGATATGTATACCGAAGTATGTCAAAAGAGGTGCTATGAAGCAGCGTATTAC
AGTGACAGTTGACAGCGACAGCTATCAGTTGCTCAAGGCATATATGATGTCATATCTCCGGTCTGGTAA
GCACAACCATGCGAAATGAAGCCGTCGTCGTCGCGAACGCTGAAAGCGGAAATCAGGAAGGGAT
GGCTGAGGTCGCCGGTTATTGAAATGAACGGCTCTTTGCTGACGAGAACAGGGACTGGTAAATGCA
GTTAAAGGTTACACCTATAAAAGAGAGAGCCGTTACGTCTGTTGAGTGTACAGAGTGATATTATT
GACACGCCCGGGCGACGGATGGTGTACCCCTGGCCAGTGCACCGTCTGTCAGATAAGTCTCCGTG
AACTTTACCCGGTGGTGCATATCGGGGATGAAAGCTGGCGCATGATGACCAACGATATGCCAGTGTGCC
GGTCTCGTTATCGGGGAGAAGTGGCTGATCTCAGGCCACCGCAAAATGACATCAAAACGCCATTAAAC
CTGATGTTCTGGGAATATAATGTCAGGCTCGTTACACAGCCAGTCTGCAGGTCGACCATAGTAC
TGGATATGTTGTTTACAGTATTATGTTAGTCTGTTTATGCAAATCTAATTAAATATTGATAT
TTATATCATTTCAGTTCTGTCAGCTTCTGTCAGGTTGATCGATTGACAGATCACTGAA
TGTGTGGCGTGGCTTAAGGGTGGGAAAGAATATAAGGTGGGGTCTTATGTTAGTTGATCTGTT
TGCAGCAGCCGCCGCATGACCAACTCGTTGATGGAAGCATTGTGAGCTCATATTGACAACG
CGCATGCCCATGGCCGGGGTGCAGAATGTGATGGCTCCAGCATTGATGGTCGCCCGTCTGC
CCGAAACTCTACTACCTTGACCTACGAGACCGTGTCTGAAACGCCGTTGGAGACTGCAGCCTCGCCGC
CGCTCAGCCGCTGCAAGCCACGCCCGGGATTGTGACTGACTTTGCTTCTGAGGCCGTTGCAAGC
AGTGCAGCTCCGTTCATGCCCGCGATGACAAGTTGACGGCTTTGGCACAATTGGATTCTTGA
CCCGGGAACTTAATGTCGTTCTCAGCAGCTGGATCTGCCAGCAGGTTCTGCCCTGAAGGCTTC
CTCCCCCTCCAATGCGTTAAACATAAAACAGACTCTGTTGGATTGGATCAAGCAAGTG
TCTTGTGCTTATTAGGGTTTGCAGCGCGGTAGGCCCCGGACCAGCGGTCTGGTGTGAGGG
TCTGTGTTAGTTTCCAGGACGTTGAAAGGTGACTCTGGATGTTGAGTACATGGCATAAGCCGTC
TCTGGGGTGGAGGTAGCACCAGTGCAGAGCTTCAGTGTGCGGGGTGGTGTGAGTGTCCAGTC
CAGGAGCGCTGGCGTGGTGCCTAAAATGCTTTCAGTAGCAAGCTGATTGCCAGGGCAGGCCCTGG
TGTAAAGTGTACAAAGCGGTTAGCTGGATGGGTGCACTACGTGGGATATGAGATGCATCTGGACTG
TATTTTGTGCTTGTGACTGGGAAATTGTCAGTGTTAGCTTAAAGGAAATGCGTGGAGAACATTGGAGACGC
CCTTGTGACTCCAAGATTTCAGTCATGCTTCAATGATGGCAATGGGCCACGGCGGCCCTG
GGCGAAGATATTCTGGATCACTAACGTCAAGTGTGTTCCAGGATGAGATCGTCAAGGCCATT
ACAAAGCGCGGGCGGAGGGTGCCAGACTGCGGTATAATGGTCCATCCGGCCAGGGCGTAGTTACCC
CACAGATTGCAATTCCCACGCTTGAGTTGAGATGGGGGATCATGTCACCTGCGGGCGATGAAGAA
AACGGTTTCCGGGGTAGGGGAGATCAGCTGGGAAGAAAGCAGGTTCTGAGCAGCTGCACTACCGCAG
CCGGTGGGCCGTAATCACACCTATTACGGGTGCAACTGGTAGTTAAGAGAGCTGAGCTGCCGTCA

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

CCCTGAGCAGGGGGCCACTTCGTTAACGATGTCCTGACTCGCATGTTTCCCTGACCAAATCCGCCAG
AAGGCCTCGCCGCCAGCGATAGCAGTTCTGCAAGGAAGCAAAGTTTCAACGGTTGAGACCGTCC
GCCGTAGGCATGCTTGAGCGTTGACCAAGCAGTCCAGGCCGCTCCACAGCTCGTCACCTGCTCTA
CGGCATCTCGATCCAGCATATCCTCGTTCGCGGGTTGGGGCGGCTTCGCTGTACGGCAGTAGTCGG
TGCTCGTCCAGACGGGCCAGGGTCACTGTCTTCCACGGGCGCAGGGCCTCGTCAGCGTAGTCTGGTCA
CGGTGAAGGGGTGCGCTCCGGCTGCGCCTGGCAGGGTGCCTGAGGCTGGTCTGCTGGTCTGAA
GCGCTGCCGGTCTTCGCCCTGCGCGTCGGCCAGGTAGCATTGACCATGGTGTCAAGTCCAGCCCCTCC
GCGCGTGGCCCTTGGCGCGCAGCTTGCCTTGGAGGAGGCGCCACGAGGGCAGTGCAGACTTTGA
GGCGTAGAGCTTGGCGCGAGAAATACGATTCCGGGAGTAGGCATCCCGCCGCAGGCCCGCAGAC
GGTCTCGCATTCCACGAGCCAGGTGAGCTCTGGCGTTGGGTCAAAAACAGGTTCCCCATGCTTT
TTGATGCGTTCTTACCTCTGGTTCCATGAGCCGGTGTCCACGCTCGGTGACGAAAGGCTGTCCTG
CCCCGTATAACAGACTTGAAGAGGCCCTGTCCTGAGCGGTGTTCCCGGGTCCCTCGTATAGAAACTCGGA
CCACTCTGAGACAAAGGCTCGCTCCAGGCCACGAAGGAGGCTAAGTGGAGGGTAGCGGTGCGTTG
TCCACTAGGGGGTCCACTCGCTCCAGGGTGTGAAGACACATGTCGCCCTCTCGGCATCAAGGAAGGTGA
TTGGTTTGAGGTGTAGGCCACGTGACCGGTGTCTGAAGGGGGCTATAAAAGGGGTGGGGCGCG
TTCGTCCTCACTCTCCGCATCGCTGTGCGAGGGCAGCTGTTGGGGTAGTACTCCCTTGAAAAA
GCGGGCATGACTTCTCGCCTAAGATTGTCAGTTCCAAAACGAGGAGGATTGATATTCACCTGGCCCG
CGGTGATGCCTTGAGGGTGGCCGATCCATCTGGTCAGAAAAGACAATCTTTGTTGTCAGCTTGGT
GGCAAACGACCCGTAGAGGGCGTTGGACAGCAACTTGGCGATGGAGCGCAGGGTTGGTTTGCGCA
TCGGCGCCTTGGCGCGATGTTAGCTGCACGTATTCGCGCAACCGCACCGCATTGGAAAGA
CGTGGTGCCTCGTGGCACCAGGTGACCGCCAAACCGCGTTGTCAGGGTAGCAAGGTCAACGCT
GGTGGCTACCTCTCCCGTAGGGCGCTCGTGGTCCAGCAGAGGGCGCCCTGCGCAGCAGAATGGC
GGTAGGGGTCTAGCTCGTCTCGTCCGGGGGCTCGTGTAAAGACCCCGGGCAGCAGGCGCG
CGTGAAGTAGCTATCTGCATCTTGCAAGTCTAGCGCTGTCGCGGGCAAGCGCG
CTCGTATGGTTGAGTGGGGACCCATGGCATGGGTGGTAGCGCGAGGCGTACATGCCGAAATG
TCGTAAACGTAGAGGGCTCTGTAGTATTCAAGATATGTAGGGTAGCATCTTCAACCGGGATGCTGG
CGCGCACGTAACTGTATAGTTCGTCGAGGGAGCGAGGAGTGGGACCGAGGTTGCTACGGGCGGGCTG
CTCTGCTCGAAGACTATCTGCCTGAAGATGGCATGTGAGTGGATGATATGGTTGGACGCTGGAAGACG
TTGAAGCTGGCTCTGTGAGACCTACCGCGTACGCACGAAGGAGGCGTAGGAGTCGCGCAGCTGTTGA
CCAGCTCGGGTGACCTGCACGTCTAGGGCGAGTAGTCCAGGGTTCTTGATGATGTCATACTTATC
CTGTCCTTTTCCACAGCTCGGGTGTAGGACAAACTCTCGGGTCTTCACTACTCTGGATC
GGAAACCGTGGCCTCCGAACGGTAAGAGCCTAGCATGTAAGACTGGTTACGGGCTGGTAGGCGCAG
ATCCCTTTCTACGGGTAGCGCTATGCCCTGCGGGCTTCCGGAGCGAGGTGTGGGTAGCGCAAAGGT
GTCCTGACCATGACTTGAGGTACTGGTATTGAAGTCAGTGTGTCGTCATCGGCCCTGCTCCAGAC
AAAAAGTCGTGCGCTTTGGAACCGGGATTGGCAGGGGAAGGTGACATGTTGAAGAGTATCTTC
CCGGCGAGGCATAAAGTTGCGTGTGATGCCAGGGTCCCGCACCTCGAACGGTTGTAATTACCTG
GGCGCGAGCACGATCTGCTAAAGCCGTTGATGTTGGCCACAATGTAAGTTCCAAGAAGCGCGGG
ATGCCCTTGATGGAAGGAATTTTAAGTTCTCGTAGGTGAGCTCTTCAGGGAGCTGAGCCGTGCT
CTGAAAGGGCCAGTCTGCAAGATGAGGGTTGGAAGCGACGAATGAGCTCACAGGTACGGGCATTAG
CATTTGCAAGTGGTGCAGAACGGTCTAAACTGGCGACCTATGCCATTGGGTGATGCAAGTAG
AAGGTAAGGGGTCTTGTCCCAGCGGCTCCATCAAGGTTCGCGCTAGGTCTCGCGGGCAGTCAGTA
GAGGCTCATCTCCGCCAACCTCATGACCACGATGAAGGGCAGGAGCTGCTCCAAAGGCCCCATCCA
AGTATAGGTCTCTACATCGTAGGTGACAAAGAGACGCTCGTGCAGGGATGCGAGCCGATGGGAAGAAC
TGGATCTCCGCCACCAATTGGAGGAGTGGCTATTGATGTTGAAAGTAGAAGTCCCTGCGACGGGCG
AACACTCGTGTGGCTTTGTAAGGAGCTGCGCAGTAGTGGCAGCGGTGACGGGCTGACATCCTGCAC
GAGGTTGACCTGACGACCGCGACAAGGAAGCAGAGTGGGAATTGAGCCCTCGCTGGGGTTGGC
TGGTGGTCTCTACTTCGGCTGCTGTGCTTGACCGTCTGGCTGCTCGAGGGGAGTTACGGTGGATCGGA
CCACCAACGCCGCGAGCCAAAGTCCAGATGTCGCCGCGCGGGCTGGAGCTGATGACAACATCGCG
CAGATGGGAGCTGTCATGGCTGGAGCTCCCGCGGCGTAGGTCAAGGGGGAGCTCTGCAGGTTTAC
TCGCATAGACGGGTAGGGCGGGCTAGATCCAGGTGATACCTAATTCCAGGGGCTGGTTGGCG
CGTCGATGGCTTGCAGAGGCCGACATCCCCGCCGCGACTACGGTACCGCGCGGGCGGTGGCG
GGGGGTGTCCTGGATGATGCATCTAAAGCGGTGACCGGGCGAGCCCCCGAGGTAGGGGGCTCCG
GACCCGCCGGAGAGGGGGCAGGGGCACGTCGGCGCCGCGCGGGCAGGAGCTGGTCTGCGCGTAG
GTTGCTGGCGAACCGCACGACGCCGGTTGATCTCTGAATCTGGCGCTCTGCGTGAAGACGACGGG
CCGGTGAAGCTTGAGGCTGAAAGAGAGTTGACAGAATCAATTGGTGTGTTGACGGCGGCTGGCGCA

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

AAATCTCCTGCACGTCTCCTGAGTTGCTTGATAGCGATCTGGCATGAACGTCTCGATCTCTCCCTC
CTGGAGATCTCCCGTCCGGCTCGCTCCACGGTGGCGGAGGTCGTTGAAATGCGGCCATGAGCTGC
GAGAAGGCGTTGAGGCCCTCCCTCGTCCAGACGCGCTGTAGACCACGCCCTCGCATCGCGGCGC
GCATGACCACCTGCGAGATTGAGCTCCACGTGCCGGCGAAGACGGTAGTTTCGCAAGCGCTGAAA
GAGGTAGTTGAGGGTGGCGGTGTCTGCCCCAGAACAGAAGTACATAACCCAGCGTCGAACGTGGAT
TCGTTGATATCCCCAAGGCCTCAAGGCCTCCATGCCCTCGTAGAAGTCACGGCGAAGTTGAAAAACT
GGGAGTTGCGCGCCGACACGGTTAACCTCCTCCAGAAGACGGATGAGCTCGCGACAGTGTGCGCAC
CTCGCGCTCAAAGGCTACAGGGGCTTCTTCAATCTCCTTCCATAAGGGCTCCCTCT
TCTTCTTCTGGCGGGGTGGGGGAGGGGGACACGGCGGCGACGGCGACCGCGACCAGGGAGGCGTGCACAA
AGCGCTCGATCATCTCCCAGGGCGACGGCGATGGTCTCGGTGACGGCGGGCGTCTCGCGGGGCG
CAGTTGGAAGACGCCGCCCCTCATGTCGGTTATGGGTTGGCGGGGGCTGCCATCGGCAGGGATAACG
GCGCTAACGATGCATCTCAACAATTGTTGTTAGGTACTCCGCCCGAGGGACCTGAGCGAGTCCGCAT
CGACCGGATCGGAAAACCTCTCGAGAAAGGCGTCAACCAGTCACAGTCGAAGGTAGGCTGAGCACCGT
GGCGGGCGGCAGGGCGGCGTGGGGTTGTTCTGGCGGAGGTGCTGATGATGTAATTAAAGTAG
GGGGTCTGAGACGGCGATGGTCGACAGAACCATGTCCTGGTCCGGCTGCTGAATGCGCAGGC
GGTGGCCATGCCCAAGGCTTCGTTTGACATCGGCCAGGTCTTGAGTAGTCTTGATGAGCCTTTC
TACCGGCACTTCTTCTCTCCCTTGCTGCATCTCTTGATCTATCGCTCGGGCGGCGAG
TTTGGCGTAGGTGGCGCCCTTCCCTCCATGCGTGACCCCGAAGCCCTCATCGCTGAAGCAGGG
CTAGGTGCGGACAACCGCTCGGTAATATGGCCTGCTGCACCTGCGTGAGGGTAGACTGGAAGTCATC
CATGTCACAAAGCGGTGATGCGCCGTGTTGATGGTGTAAAGTCAGTTGGCATAACGGACAGGTA
ACGGTCTGGTACCGCGCTCGAGAGAGCTCGGTGTACCTGAGACCGAGTAAGCCCTCGAGTC
AGTCGTTGCAAGTCCGCAACAGGTACTGGTATCCCACCAAAAGTGCAGGGCGCTGGCGTAGAGGG
CCAGCGTAGGGTGGCGGGGCTCGGGGGCGAGATCTCCAACATAAGCGATGATATCCGAGATGTAC
CTGGACATCCAGGTGATGCCGGCGCGTGGTGGAGGCGCGAAGTCGCGGACCGGGTCCAGATGT
TGCGCAGCGGAAAAAGTGCCTCATGGTGGGACGCTCTGGCGGTGAGGCGCGCAATGTTGACGCT
CTAGACCGTGAAAAGGAGAGCGCTGTAAGCGGGACTCTCCGTTGCTGGTGGATAATTGCAAGGGT
ATCATGGCGGACGACCGGGGTTGAGCCCCGTATCCGGCGTCCCGTGTACCGGTTACCGCCCG
CGTGTGAAACCCAGGTGCGACGTACGACAACGGGGAGTGCCTCTGGCTCCCTCCAGGCGCGC
GGCTGCTCGCTAGCTTTGGCACTGCCCGCAGCGTAAGCGTTAGGCTGAAAGCGAAAGCA
TTAAGTGGCTCGCTCCCTGTAGCGGAGGGTTATTTCCAAGGGTTGAGTCGCGGGACCCCGGTTGAG
TCTCGGACCGGCCGACTGCCGCAACGGGGTTGCTCCCTCCCGTATGCAAGACCCCGTTGCAAATT
CTCCGGAAACAGGGACGAGCCCTTTTGCTTTCCAGATGCATCCGGTCTGCCAGATGCGCCCC
CCTCCTCAGCGGGCAAGAGCAAGAGCAGCGGAGACATGCAGGGCACCCCTCCCTCCATCCGCGT
CAGGAGGGGGGACATCCGCGGTTGACCGCGCAGCGAGATGGTATTACGAAACCCCGCGGCCGGCC
GCACTACCTGGACTGGAGGAGGGCGAGGGCTGGCGGGTAGGAGGCCCTCTCTGAGCGGTACCCA
AGGGTGCAGCTGAAAGCGTGTACCGTGAGCGTACGGTGGCGAGGAGGTGGCTATAGGACTGATG
GAGAGGAGCCCAGGGAGATGCGGGATCGAAAGTTCCACGCAAGGGCGAGCTGCCATGGCTGAATCG
CGAGCGGTTGCTGCCAGGGACTTGTAGCGGAGCGAGATGGTATTAGTCCCGCGCGCACAC
GTGGCGGCCGCGACCTGGTAACCGCATAACGAGCACGGTGAACCGAGGAGATTAACCTTAAAAAGCT
TTAACAAACACGTGCGTACGCTTGTGGCGCGAGGAGGTGGCTATAGGACTGATGCACTGTGGACTT
TGTAAAGCGCGCTGGAGCAAAACCAAATAGCAAGCCCTCATGGCGAGCTGTTCTTATAGTGCAGCAC
AGCAGGGACAACGAGGCATTAGGGATGCCGTCTAAACATAGTAGAGCCGAGGGCGTGGCTGCTCG
ATTGATAAACATCCTGCAGAGCATAGTGGTGCAAGGAGCGCAGCTGAGCTGGCTGACAAGGTGGCGC
CATCAACTATTCCATGCTTAGCTGGCAAGTTTACGCCGCAAGATATACCATACCCCTACGTTCCC
ATAGACAAGGAGGTAAGATCGAGGGTTCTACATGCCATGGCGTGAAGGTGCTTACCTTGAGCGACG
ACCTGGCGTTTATCGCAACGAGCGCATCCACAAGGCCGTGAGCGTGAAGCCGGCGGCGAGCTCAGCGA
CCCGAGCTGATGCACAGCCTGAAAGGGCCCTGGCTGGCACGGCAGCGCGATAGAGAGGCCAGTCC
TACTTGACCGGGCGCTGACCTGCGTGGGCCAAGCCAGCGCCCTGGAGGCAGCTGGGGCGGAC
CTGGGCTGGCGGTGGCACCCCGCGCGCTGGCAACGTGGCGGCGTGGAGGAATATGACGAGGACGATGA
GTACGAGCCAGAGGACGGCGAGTACTAAGCGGTGATGTTCTGATCAGATGATGCAAGACGCAACGGACC
CGCGGGTGGGGCGGCCGCTGCAGAGCCAGCGCCCTTAACCTCACGGACGACTGGGCCAGGTGAT
GGACCGCAGTCATGTCGCTGACTGCCGCAATCCTGACCGTCCGGCAGCAGCCAGGCCAACCGGCTC
TCCGCAATTCTGGAAGCGGTGGTCCCAGGGCGCGCAACCCACGCGACGAGAAGGTGCTGGCGATCGTAA
ACGCGCTGGCGAAAACAGGGCATCCGGCCGACGAGGCCGAGGGCTGGTCTACGACGGCTGCTCAGCG
CGTGGCTGTTACAACAGCGGCAACGTGCAAGACCAACCTGGACGGCTGGGGGATGTGCGCGAGGCC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

GTGGCGCAGCGTGAGCGCGCGCAGCAGCAGGGCAACCTGGGCTCCATGGTGCACAAACGCCCTCCTGA
GTACACAGCCCCCAACGTGCCGCGGGGACAGGAGGACTACACCAACTTTGTGAGCGCACTGCGGCTAAT
GGTGA^TGAGACACCGCAAAGTGAGGTGTACCAAGTCTGGGCCAGACTATTTCAGACCAGTAGACAA
GGCCTGCAGACCGTAAACCTGAGCCAGGCTTCAAAACCTTGACAGGGCTGTGGGGGTGCGGGCTCCCA
CAGGCAGCCGCGACCGTGTAGCTTGCTGACGCCAACTCGCGCCTGTTGCTGCTGCTAATAGCGCC
CTTCACGGACAGTGGCAGCGTGTCCGGGACACATAACCTAGGTCACTTGCTGACACTGTACCGCAGGCC
ATAGGTCAAGCGCATGTGGACGAGCATACTTCCAGGAGATTACAAGTGTCAAGCCGCGCTGGGCAGG
AGGACACGGGCAGCCTGGAGGCAACCTAAACTACCTGCTGACCAACCGGCCAGAAGATCCCTCGTT
GCACAGTTAACACAGCGAGGAGGAGCGCATTTCGCTACGTGAGCAGAGCGTGAGCCTTAACCTGATG
CGCGACGGGTAACGCCAGCGTGGCCTGGACATGACCGCGCAACATGGAACCGGGCATGTATGCCT
CAAACCGGCCATTATCAACCGCTAATGGACTACTTGATCGCGCCGGCGTGAACCCGAGTATTT
CACCAATGCCATCTGAACCCGACTGGTACCGCCCCCTGGTTTACACCGGGGATTGAGGTGCC
GAGGGTAACGATGGATTCTCTGGGACGACATAGACGACAGCGTGTGTTCCCGCAACCGCAGACCCCTGC
TAGAGTTGAAACAGCGCAGCAGGAGCAGGGCGCTGCGAAAGGAAAGCTTCCGAGGCCAACAGCAGCTT
GTCGATCTAGGCGTGCAGGCCCCGCGGTACAGATGCTAGTAGCCCATTCCAAGCTTGATAGGGCTCTT
ACCAACTCGCACCACCCGCCGCTGCTGGCGAGGAGGAGTACCTAAACAACCTCGCTGCTGCAGC
CGCAGCGGAAAAAAACCTGCCTCCGGCATTCCCAACACGGGATAGAGAGCCTAGTGGACAAGATGAG
TAGATGGAAGACGTACCGCAGGAGCACAGGAGCTGCCAGGCCGCCACCGCTCGTCAAAGG
CACGACCGTCAGGGGTCTGGTGTGGAGGAGCAGTACTGGCAGACGACAGCAGCGTCTGGATTGG
GAGGGAGTGGCAACCGTTGCGCACCTGCCAGGCTGGGAGAATGTTAAAAAAAAAAAGCAT
GATGCAAATAAAACCTACCAAGGCCATGGCACCGAGCGTTGGTTTCTGTATTCCCTTAGTATGC
GGCGCGCGGCGATGTATGAGGAAGGTCCTCCCTCTACGAGAGTGTGGTAGCGCGGCCAGTGGC
GGCGCGCTGGTTCTCCCTCGATGCTCCCTGGACCCGCCGTTGTGCTCCGCGTACCTGCCGCT
ACCGGGGGAGAACAGCATCCGTTACTCTGAGTTGGCACCCCTATTGACACCACCGCTGTACCTGG
TGGACAACAAGTCAACGGATGTGGCATCCCTGAACCTACAGAACGACCACAGCAACTTCTGACCACGGT
CATTCAAACAATGACTACAGCCGGGGAGGCAAGCACACAGACCATCAATCTGACGACCGGTCGAC
TGGGGCGGCGACCTGAAACCATCCTGCATACCAACATGCCAATGTGAACGAGTTCATGTTACCAATA
AGTTAAGGGCGGGTGTGGTGTGCGCTTGCCTACTAAGGACAATCAGGGAGCTGAAATACGAGTG
GGTGGAGTTACGCTGCCAGGGCAACTACTCCGAGGACCATGACCATAGACCTTATGAAACAACCGATC
GTGGAGCAGTACTTGAAGTGGCAGACAGAACGGGTTCTGGAAAGCGACATGGGGTAAAGTTGACA
CCCGCAACTCAGACTGGGTTTGACCCGTCAGTGGTCTGTACGCTGGGTATATAACAAACGAAGC
CTTCCATCCAGACATCATTGCTGCCAGGATGCGGGTGGACTTCACCCACAGCCGCTGAGCAAATTG
TTGGGATCCGAAGCGGAACCCCTCCAGGAGGGCTTTAGGATCACCTACGATGATCTGGAGGGTGGTA
ACATTCCCGACTGTTGGATGTGGACGCCATCAGGGAGCTGAAAGATGACACCGAACAGGGGGGG
TGGCGCAGGGGGCAGCAACAGCAGTGGCAGCGCGCGGAAGAGAACCTAACGCGGCCAGCGCGCAATG
CAGCCGGTGGAGGACATGAACGATCATGCCATTGCGCGACACCTTGCACACGGCTGAGGAGAAC
GGCGTAGGGCGAAGCAGCGGCCAGCTGCCGCCCCGCTGCCAACCCAGGTCGAGAACGCTCAGAA
GAAACCGGTGATCAAACCCCTGACAGAGGACAGAACAGCAGTTACAACCTAATAAGCAATGACAGC
ACCTTCACCCAGTACCGCAGCTGGTACCTTGATACAACACTACGGCACCCTCAGACCGGAATCCGCTCAT
GGACCCCTGTTGCACTCCTGACGTAACCTGCGGCTGGAGCAGGTCTACTGGCTTGCCAGACATGAT
GCAAGACCCCGTGAACCTTCCGCTCCACGCGCAGATCAGCAACTTCCGGTGGTGGCGCCAGCTGTT
CCCGTGCACTCCAAGAGCTCTACAAACGACCAGGCCGCTACTCCCAACTATCCGCGAGTTACCTCTC
TGACCCACGTGTTCAATCGCTTCCGAGAACAGATTGGCGCCGCCAGCCCCACCATCACCAC
CGTCAGTAAAACGTTCTGCTCTACAGATCACGGACGCTACCGCTGCCAACAGCATCGGAGGAGTC
CAGCGAGTGA^CCTTACTGACGCCAGCGCCACCTGCCCTACGTTACAAGGCCCTGGCATAGTCT
CGCCGCGCGTCTATCGAGCCGACTTTGAGCAAGCATGTCATCCTTATATGCCAGCAATAACAC
AGGCTGGGCTGCGCTTCCAAGCAAGATGTTGGGGCCAAGAACGCGCTCCGACCAACACCGAGTG
CGCGTGCAGGGCAACTACCGCGCCCTGGGCGCAGAACACGGCCGCACTGGGCGCACCACCGTCG
ATGACGCCATCGACGCCGGTGGAGGAGGCGCGCAACTACACGCCAACGCCACCAGTGTCCACAGT
GGACGCCGCAATTCAAGACCGTGGTGCAGGGAGGCCGCTATGCTAAAATGAAGAGACGGCGGAGGCGC
GTAGCACGTCGCCACCGCGCCAGCCGACTGCCCAACCGCGCCGGCGCCCTGCTTAACCGCG
CACGTCGCACCGGCCAGGGCGGCACTGCCGCGCCAGCAGCCGCGCCATTAGTGTATGACTCAGGGTGCAGG
GGCAACGTGTATTGGGTGCGCAGCTCGTTAGCGGCCCTGCGCGTGCAGCCCGGCCGCA
ACTAGATTGCAAGAAAAACTACTTAGACTCGTACTGTTGATGTATCCAGCGGGCGGCCGCAACGA

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

TACATTAACCTGGAGCACGCTGGTCCCTGACTATATGGACAACGTCAACCCATTAAACCACCGAC
ATGCTGGCTGCGTACCGCTAACATGTTGCTGGCAATGGTCGCTATGTGCCCTCCACATCCAGGTGCC
TCAGAAGTCTTGCCTTAAACCTCCTCTGCCGGCTCATACACCTACGAGTGGAACTTCAGG
AAGGATGTTAACATGGTCTGCAGAGCTCCCTAGGAATGACCTAAGGGTTGACGGAGCCAGCATTAAAGT
TTGATAGCATTTGCCTTACGCCACCTTCTCCCATGGCCCACAACACCGCCTCCACGCTTGAGGCCAT
GCTTAGAAACGACACCAACGACCAGTCCTTAACGACTATCTCTCCGCCAACATGCTCTACCCATA
CCCGCCAACGCTACCAACGTGCCATATCCATCCCCCTCCGCACTGGGGCTTCCGCGCTGGCCT
TCACGCGCTTAAGACTAAGGAAACCCATCACTGGCTCGGGTACGACCTTATTACACCTACTCTGG
CTCTATACCCCTACCTAGATGGAACCTTTACCTAACCCACACCTTAAGAAGGTGGCATTACCTTTGAC
TCTTCTGTAGCTGGCTGGCAATGACCGCCTGCTTACCCCCAACAGAGTTGAAATTAAAGCGCTCAGTTG
ACGGGGAGGGTTAACACGTTGCCAGTGTAAACATGACCAAAGACTGGTCTGGTACAAATGCTAGCTAA
CTACAACATTGGCTACCAAGGGCTTCTATATCCCAGAGAGCTACAAGGACCGCATGTACTCCTTCTTACA
AACTCCAGCCCATGAGCGTCAGGTGGATGATACTAAATACAAGGACTACCAACAGGTGGCATCC
TACACCAACACAACAACTCTGGATTTGTTGGCTACCTTGCCCCAACATGCGGAAGGACAGGCCAAC
TGCTAACTTCCCCTATCGTTAGGCAAGACCGCAGTGTACAGCATTACCCAGAAAAAGTTCTTGC
GATCGCACCTTGGGCATCCCATTCTCAGTAACCTTATGTCATGGCGCACTCACAGACCTGGGC
AAAACCTTCTCTACGCCAACCTCCGCCACCGCGCTAGACATGACTTTGAGGTGGATCCATGGACGAGCC
CACCCCTTCTTATGTTGTTGAAGTCTTGACGTGGTGTGCACCGGCCGACCGCGGTCA
GAAACCGTGTACCTGGCACGCCCTCTCGGCCGCAACGCCAACATAAGAAGCAACATCAAC
AACAGCTGCCCATGGCTCCAGTGAGCAGGAACGTAAAGCCATTGTCAAAGATCTGGTTGGGCC
TATTTTTGGCACCTATGACAAGCGTTCCAGGCTTGTCTCCACACAAGCTCGCTGCGCATAG
TCAATACGGCCGGTGCAGACTGGGGCGTACACTGGATGGCTTGCCTGGAACCCGCACTAAAAAC
ATGCTACCTTTGAGCCCTTGGCTTCTGACCGAGCTCAAGCAGGTTACAGTTGAGTACGAG
TCACTCCTGGCGTAGCGCATTGCTTCTTCCCCGACCGCTGTATAACGCTGGAAAAGTCCACCCAA
GGGTACAGGGGCCAACCTCGGCCCTGTGGACTATTCTGCTGATGTTCTCCACGCCCTTGCAACTG
GCCCAAACCTCCATGGATCACAAACCCACCATGAACCTTATTACGGGGTACCCAACCTCCATGCTCAAC
AGTCCCCAGGTACAGCCCACCCCTGCGCGAACAGAACAGCTCTACAGCTTCTGGAGCGCAACTCGC
CCTACTTCCGAGCCACAGTGCAGATTAGGAGGCCACTTCTTTGTCACTGAAAAACATGAAAA
ATAATGTACTAGAGACACTTCAATAAAAGCAAATGTTTATTTGACTACTCTCGGGTGATTATTAC
CCCACCCCTGGCGTCTGCCTTAAAGGGTCTGCGCGCATCGCTATGCGCCACTGGCA
GGGACACGTGCGATACTGGTGTGACTGCTCCACTAAACTCAGGACAACCATCCGCGAGCTCGGT
GAAGTTTCACTCCACAGGCTGCGACCACATACCAACCGTTAGCAGGTGGCGCGATATCTGAAG
TCGAGTTGGGCCTCCGCCCTGCGCGCGAGTTGCGATACACAGGGTTGAGCACTGGAACACTATCA
GCGCGGGTGGTGCACGCTGGCAGCAGCTTGTGGAGATCAGATCCGCTCCAGGTCTCCCGCGTT
GCTCAGGGCGAACGGAGTCACCTTGGTAGCTGCCTTCCAAAAGGGCGGTGCCCAGGCTTGAGTTG
CACTCGCACCGTAGTGGCATCAAAGGTGACCGTGCCGGTCTGGCGTTAGGATAACAGCGCTGCATAA
AAGCCTTGATCTGCTTAAAGCCACCTGAGCCTTGCCTTCAGAGAACATGCCAACAGACTGCC
GGAAAACGTATTGGCCGGACAGGCCGCGTCGTGCACCGAGCACCTGCGTGGTGGAGATCTGCACC
ACATTTCGGCCCCACCGGTTCTCACGATCTGGCTTGCTAGACTGCTCTTCAGCGCGCTGCCGT
TTTCGCTCGCACATCCATTCAATCAGTGCCTTATTATCATAATGCTCCGTGAGACACTTAAG
CTCGCCTTCGATCTCAGCGCAGCGGTGCAGCCACAACCGCGCAGCCGTGGCTCGTGTAGCTTAGGTC
ACCTCTGCAAACGACTGCAGGTACGCCCTGCAGGAATGCCCATCGTCACAAAGTCTTGTGCTGG
TGAAGGTAGCTGCAACCCGCGGTGCTCTCGTTAGCCAGGTCTGCTAGCCAGGCTTGATACGGCC
TTGGTCAGGCAGTAGTTGAAGTTGCCTTAGATGTTACCTCAGTGGTACTTGTCCATCAGCGCG
GCAGCCTCCATGCCCTCTCCACGCAGACACGATCGGCACACTCAGGGTTCATACCGTAATTTCAC
TTTCGCTCGCTGGCTCTCCCTCTGCGTCCGCATACACGCCACTGGTGTCTTCATT
CAGCCGCCACTGTGCGCTTACCTCCTTGCCATGCTGATTAGCACCAGTGGGTTGCTGAAACCCACC
ATTGTAGCGCACATCTCTTCTCGCTGTCACGATTACCTCTGGTGTAGGGCGGGCTCGG
GCTTGGGAGAAGGGCGCTTCTTTCTTCTGGCGCAATGGCAAATGCCCGCCGAGGTGATGGCG
CGGGCTGGGTGTGCGCGGCCACAGCGCGTCTGTGATGAGTCTCCTCGTCTCGGACTCGATACGCC
CTCATCCGCTTTTGGGGCGCCGGGAGGCGGGCGACGGGGACGGGACGACACGTCCTCCATGG
TTGGGGAGCTGCGCCGACCGCGTCCGCGCTGGGGTGGTTCGCGCTGCTCCTTCCGACTGGC
CATTTCCCTCTCCTATAGGCAGAAAAAGATCATGGAGTCAGTCAGGAGAAGAACAGCCTAACCGCCCC
TCTGAGTTGCCACCCGCCCTCACGATGCCGCAACGCCCTACACCTTCCCGTCAAGGGCAGGG
CGCTTGAGGAGGAGGAAGTGTATTACGAGCAGGACCCAGGTTGTAAGCGAAGACGACGAGGACCGCTC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

AGTACCAACAGAGGATAAAAGCAAGACCAGGACAACGCAGAGGCAAACGAGGAACAAGTCGGGCGGGGG
GACGAAAGGCATGGCAGACTACCTAGATGTGGAGACGACGTGCTGTTGAAGCAGTCAGCGCCAGTGC
CCATTATCTGCAGCGCTTGCAAGAGCGCAGCGATGTGCCCATAGCGGATGTCAGCCTGCCTA
CGAACGCCACCTATTCTCACCGCGCTACCCCCAAACGCCAAGAAAAGGCCACATGCAGGCCAACCCG
CGCCTCAACTTCTACCCGTTTGCCTGCCAGAGGTGCTTCCCACCTACACATCTTTCCAAGAACT
GCAAGATAACCCCTATCCTGCCGCTGCCAACCCGAGGCCAGCGGACAAGCAGCTGGCCTGCCAGGGCG
TGTCAACCTGATATGCCCTCGCTAACGAAAGTGCCAAAATCTTGAGGGTCTGGACGCGACGAGAAG
CGCGCGGAAACGCTTGCAACAGGAAACAGCAGAAATGAAAGTCACTCTGGAGTGTGGTGGAAACTCG
AGGGTGACAACGCGCCCTAGCGTACTAAAAGCAGCATCGAGGTGACCCACTTGCCTACCCGGCACT
TAACCTACCCCCCAAGGTCAATGAGCACAGTCATGAGTGAGCTGATCGTGCCTGCCAGGCCCTGGAG
AGGGATGCAAATTGCAAGAACAAACAGAGGAGGGCTACCCGAGTGGCAGGAGCAGCTAGCGCGCT
GGCTTCAAACGCGCAGCCTGCCACTTGGAGGAGCGACGCAAACATAATGATGGCCGAGTGCCTGTTAC
CGTGGAGCTTGAGTCATGCAGCGGTTCTTGCTGACCCGGAGATGCAGCGCAAGCTAGAGGAACATTG
CACTACACCTTTCGACAGGGCTACGTACGCCAGGCCTGCAAGATCTCAACGTTGAGCTCTGCAACCTGG
TCTCCTACCTTGGAAATTGCAACGAAACCGCCTGGCAAAACGTGCTTATTCCACGCTCAAGGGCGA
GGCGCGCCGCGACTACGTCGCGACTCGCTTACTTATTCTATGCTACACCTGGCAGACGGCCATGGC
GTTTGGCAGCAGTGCTTGAGGAGTGCAACCTCAAGGAGCTGCAAGAAACTGCTAAAGCAAACATTGAAGG
ACCTATGGACGGCCTTCACAGAGCGCTCCGTGGCCGCGCACCTGGCGGACATCATTTCCCCGAACGCCT
GCTTAAAACCTGCAACAGGGCTGCCAGACTTCAACAGCATGTTGAGAACTTAGGAACCTT
ATCCTAGAGCGCTCAGGAATCTGCCGCCACCTGCTGCACTCCTAGCGACTTTGTGCCCATTAAGT
ACCGCGAATGCCCTCCGCCCTTGGGCCACTGCTACCTCTGCACTACCTTGCTACCA
CTCTGACATAATGAAAGACGTGAGCGGTGACGGTCACTGGAGTGTCACTGTCCTGCAACCTATGCACC
CCGCACCGCTCCCTGGTTGCAATTGCAACGCTGCTAACGAAAGTCAAACATTACGGTACCTTGAGCTGC
AGGGTCCCTGCCTGACGAAAAGTCCGCGCTCCGGGTTGAAACTCACTCCGGGCTGTGGACGTCGGC
TTACCTTCGCAAATTGACCTGAGGACTACACGCCACGGAGATTAGGTTCTACGAAGACCAATCCCG
CCGCCAAATGCGGAGCTTACGCCCTGCGTCAATTACCCAGGGCACATTCTGGCCAATTGCAAGCCATCA
ACAAAGCCGCCAAGAGTTCTGCTACGAAAGGGACGGGGGTTACTTGACCCCCAGTCGGCGAGGA
GCTCAACCCAACTCCCCCGCCGCCAGCCCTATCAGCAGCAGCGCGGGCCCTTGCTTCCCAGGATGGC
ACCCAAAAAGAAGCTGCACTGCCGCCACCCACGGAGCAGGAGGAATACTGGGACAGTCAGGAG
GAGGTTTGAGCAGGAGGAGGAGGACATGATGGAAGACTGGGAGGAGCTAGACGAGGAAGCTCCGAGG
TCGAAGAGGTGTCAGACGAAACACCGTCACCCCTGGTCGCACTCCCTGCCGGCAGAACATCGC
AACCGGTTCCAGCATGGCTACACCTCCGCTCTCAGCGCCGCCACTGCCGTGCGCACCCAAC
CGTAGATGGGACACCACCTGGAACCAAGGGCCGTAAGTCCAAGCAGCGCCGCGTTAGCCCAAGAGCAAC
AACAGCGCCAAGGCTACCGCTCATGGCGGGCACAGAACGCCATAGTTGCTTGCAAGACTGTGG
GGGCAACATCTCCTGCCGCCGTTCTTCTACCATCACGGCGTGGCTTCCCCGTAACATCTG
CATTACTACCGTCATCTACAGCCATACTGCACGGCGGAGCGGAGCAGCAACAGCAGCGGCC
ACACAGAACGAAAGGGGACCGGATAGCAAGACTCTGACAAGGCCAACAGAGCAAC
CAGGAGGAGGAGCGCTGCGTCTGGCGCCACAGAACCCGTATGACCCCGAGCTTAGAAACAGGATTT
TCCCACTCTGTATGCTATATTCAACAGAGCAGGGCCAAGAACAGAGCTGAAAATAAAAACAGGTCT
CTGCGATCCCTCACCGCAGCTGCCGTATCACAAAGCGAAGATCAGCTCGGCGCACGCTGGAAGACG
CGGAGGCTCTCTCAGTAAATACTGCGCGTACTCTAAGGACTAGTTGCGGCCCTTCTCAAATTAA
AGCGCAAAACACTACGTCACTCCAGCGGCCACACCCGGCGCACCTGTCGTCAGCGCCATTATGAGC
AAGGAAATTCCCACGCCCTACATGTGGAGTTACAGGCCACAAATGGACTTGCGGCTGGAGCTGCCAAG
ACTACTCAACCGAATAAAACTACATGAGCGGGACCCACATGATATCCGGGTCAACGGAATCCGCG
CCACCGAAACCGAATTCTCTTGGAACAGGGCGCTATTACCAACACCTCGTAATAACCTTAATCCCCT
AGTTGGCCCGCTGCCCTGGTGTACAGGAAAGTCCCCTCCACCAACTGTGGTACTTCCCAGAGACGCC
AGGCCGAAGTTCAGATGACTAACCTAGGGGCCAGCTTGCGGGCGTTCTGTCACAGGGTGCAGCGC
CGGGCAGGGTATAACTCACCTGACAATCAGAGGGCGAGGTATTAGCTCAACGACGAGTCGGTGAGCTCC
TCGCTTGGTCTCCGTCGGACGGGACATTCAAGATCGCGGCCCTTGCGGCCGCGCTTCACTCAGCGCTCGTC
AGGAATCCTAACTCTGCAACCTCGTCTCTGAGCCCGCTCTGGAGGCATTGGAACCTGCAATTAT
TGAGGAGTTGTGCCATCGGTCACTTTAACCCCTCTGGACCTCCGCCACTATCCGGATCAATT
ATTCCCTAACTTTGACCGGGTAAAGGACTCGCGGAGGGCTACGACTGAAATGTTAAGTGGAGAGGGAGAGC
AACTGCGCCTGAAACACCTGGTCACTGTCGCCACAAGTGTGTTGCCCGGACTCCGGTGAGTTTG
CTACTTTGAATTGCCCGAGGATCATATGAGGGCCGGCGACGGCGTCCGGCTTACCGCCAGGGAGAG
CTGCCCCGTAGCCTGATTGGAGTTACCCAGCGCCCCCTGCTAGTTGAGCGGGACAGGGGACCCCTGTG

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

TTCTCACTGTGATTGCAACTGTCCTAACCTTGGATTACATCAAGATCTTGTGCCATCTCTGTGCTGA
GTATAATAAATACAGAAAATTAAAAATACTGGGGCTCTATGCCATCCTGTAAACGCCACCGTCTTCAC
CCGCCCAAGCAAACCAAGCGAACCTTACCTGGTACTTTAACATCTCTCCCTCTGTGATTACAACAGT
TTCAACCCAGACGGAGTGAGTCTACGAGAGAACCTCTCCGAGCTCAGCTACTCCATCAGAAAAACACCA
CCCTCCTAACCTGCCGGAACGTAACGAGTCGAGTCAGCTCACCGGCCGCTGCACCAACACCTACCGCCTGACCGTAA
ACCAGACTTTCCGGACAGACCTCAATAACTCTGTTACCAGAACAGGAGGTGAGCTTAGAAAACCCCTT
AGGGTATTAGGCCAAGGCGCAGCTACTGTGGGTTATGAACAATTCAAGCAACTCTACGGCTATTCT
AATTCAAGGTTCTCTAGAAATGGACGGAATTATTACAGAGCAGCGCCTGCTAGAAAGACGCAGGGCAGCG
GCGGAGCAACAGCGCATGAATCAAGAGCTCCAAGACATGGTTAACTTGACCCAGTGCAAAAGGGTATCT
TTTGTCTGGTAAAGCAGGCCAAGTCACCTACGACAGTAATACCACCGGACACCGCCTAGCTACAAGTT
GCCAACCAAGCGTCAGAAATTGGTGGTCATGGTGGAGAAAGCCCATTACCATACAGCACTCGGTA
GAAACCGAAGGCTGCATTCACTCACCTGTCAAGGACCTGAGGATCTCTGCACCCATTAAAGACCCCTGT
GCGGTCTCAAAGATCTTATTCCCTTAACTAATAAAAAAAATAAAAGCATCACTTACTTAAATCAG
TTAGCAAATTCTGTCCAGTTATTCACTCACCTACGACAGTAATACCACCGGACACCGCCTAGCTGGTATTGCAGCTT
CCTCCTGGCTGCACCAACTTCTCCACAATCTAAATGGAATGTCAGTTCCCTGTGTTCTGTCCATCCGCA
CCCACTATCTCATGGTGTGAGATGAAGCGCGCAAGACCGCTCTGAAGATACTTCAACCCCGTGTATC
CATATGACACGGAAACCGGTCCACTGTGCTTTCTTACTCCTCCCTTGATCCCCAATGGGTT
TCAAGAGAGTCCCCCTGGGTACTCTCTTGCCTATCGAACCTCTAGTTACCTCCAATGGCATGCTT
GGCCTCAAATGGCAACGGCCTCTCTGGACGAGGCCGCAACCTACCTCCAAATGTAACCAACTG
TGAGCCCACCTCTCAAACCAAGTCACACATAACCTGAAATATCTGCACCCCTCACAGTTACCTC
AGAAGCCCTAACTGTGGCTGCCGCCACCTCTAAATGGTCGCGGGCAACACACTCACCATGCAATCACAG
GCCCGCTAACCGTGACGACTCCAAACTTAGCATTGCCACCCAAGGACCCCTCACAGTGTCAAGGAA
AGCTAGCCCTGCAAACATCAGGCCCTCACCACCAACGATAGCAGTACCTTACTATCACTGCCTCACC
CCCTCTAACTACTGCCACTGGTAGCTGGCATTGACTTGAAAGAGCCCATTATACACAAAATGGAAA
CTAGGACTAAAGTACGGGCTCTTGATGTAACAGACGACCTAACACTTGTACCGTAGCAACTGGTC
CAGGTGTGACTATTAATAACTTCTTGAAACTAAAGTTACTGGAGCCTGGTTTGATTACAAGG
CAATATGCAACTTAATGTAACGGAGGACTAAGGATTGATTCTCAAACAGACGCCTTAACTTGATGTT
AGTTATCCGTTGATGCTCAAACCAACTAAATCTAAGACTAGGACAGGGCCTCTTTTATAAAACTCAG
CCCACAACCTGGATATTAACTACAACAAAGGCCCTTACTTGTGTTACAGCTCAAACAATTCCAAAAGCT
TGAGGTTAACCTAACGACTGCCAAGGGGTTGATGTTGACGCTACGCCATTAAATGCAGGAGAT
GGGCTGAAATTGGTTCACCTAAATGCACCAAACACAAATCCCCTAAACACAAAATGGCCATGCCCTAG
AATTGATTCAAACAAAGCTATGGTCTAAACTAGGAACCTGGCTTAGTTGACAGCACAGGTGCCAT
TACAGTAGGAAACAAAATAATGATAAGCTAACCTTGCTGACCCACACCAGCTCCATCTCTAAACTGTAGA
CTAAATGCAGAGAAAGATGCTAAACTCACCTTGCTTAAACAAATGTGGCAGTCAAATACTGCTACAG
TTTCAGTTGGCTGTTAAGGAGCTTGGCTCCAATATCTGAAACAGTTCAAAGTGTCTCATCTTATTAT
AAGATTGACGAAAATGGAGTGTACTAAACAATTCTTCTGGACCCAGAAATTGAAACTTAGAAAT
GGAGATCTACTGAAGGCACAGCCTATACAAACGCTGTTGGATTATGCCCTAACCTATCAGCTTATCCAA
AACTCACGGTAAACTGCCAAAGTAACATTGTCAAGTTACTTAAACGGAGACAAAACAAAC
TGTAACTAACCACTAACACTAACGGTACACAGGAAACAGGAGACACAACCTCAAAGTGCATACTCTATG
TCATTTCTGGACTGGTCTGCCACAACATCATGGTAACAGACATATTCTTAGGTGTTATATTCCACACGG
CATACATTGCCAAGAATAAGAATCGTTGTTATGTTCAACGTGTTATTTCATTGCAATTGCAAGAAA
TTTCGAATCATTTTCAATTCACTGAGTAGTATAGCCCCACACCACAGCTTATACAGATACCGTACCTTAA
TCAAACTCACAGAACCTAGTATTCAACCTGCCACCTCCCTCCAACACACAGAGTACACGTCTTCT
CCCCGGCTGGCTTAAAGCATCATATCATGGTAACAGACATATTCTTAGGTGTTATATTCCACACGG
TTTCCTGTCGAGCCAAACGCTCATCAGTGATATTAAATAACCTCCCGGGCAGCTCACTTAAGTTCATGTC
GCTGTCCAGCTGCTGAGCCACAGGCTGCTGCCAACCTGCGGTTGCTTAACGGGCCGGAAGGAGAAGTC
CACGCCTACATGGGGTAGAGTCATAATCGCATCAGGATAGGGCGGTGGTGTGCAAGCGCGCGAA
TAAACTGCTGCCGCCGCTCCGTCTGCAGGAATACAACATGGCAGTGGTCTCCTCAGCGATGATTG
CACCGCCCGCAGCATAAGGCGCTTGTCTCCGGGACAGCAGCGCACCCCTGATCTCACTTAAATCAGCA
CAGTAACTCAGCACAGCACCAATATTGTTCAAACACAGTGCAAGGCGCTGTATCAAAGCTCA
TGGCGGGGACACAGAACCCACGTGGCATCATACCAACAGCGCAGGTAGATTAGTGGCAGCCCTCAT
AAACACGCTGGACATAAACATTACCTTTGGCATGTTGTAATTCAACCACCTCCCGTACCATATAAAC
CTCTGATTAACATGGGCCATCCACCACTCTAAACCAAGCTGGCAAAACCTGCCCGGGCTATAC
ACTGCAGGGAACCGGGACTGGAACAATGACAGTGGAGAGCCCAGGACTCGTAACCATGGATCATCATGCT
CGTCATGATATCAATGTTGGCACAACACAGGCACACCGTGCATACACTTCTCAGGATTACAAGCTCCTCC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

CGCGTTAGAACCATATCCCAGGGAAACAACCCATTCTGAATCAGCGTAAATCCCACACTGCAGGGAAAGAC
CTCGCACGTAACTCACGTTGTGATTGTCAAAGTGTACATTCCGGCAGCAGCGGATGATCCTCAGTAT
GGTAGCGCGGGTTCTGTCTCAAAGAGGTAGACGATCCCTACTGTACGGAGTGCAGCCGAGACAACCGA
GATCGTGTGGTGTAGTGTCACTGCCAATGGAACGCCGACGTAGTCATATTCTGAAGCAAAACCAG
GTGCGGGCGTGACAAACAGATCTCGTCTCCGGTCTCGCGCTTAGATCGCTCTGTGTAGTAGTTGTAGT
ATATCCACTCTCTCAAAGCATCCAGGCGCCCCCTGGCTTCTGGTTCTATGTAAACTCCTCATGCGCCGC
TGCCTGATAACATCCACCACCGCAGAATAAGCCACACCCAGCCAACCTACACATTGTTCTGCAGTC
CACACGGGAGGAGCGGGAAAGAGCTGGAAGAACCATGTTTTTTTATTCCAAAAGATTATCCAAAACC
TCAAAATGAAGATCTATTAAGTGAACCGCCTCCCTCCGGTGGGTCAAACCTACAGCCAAAGAAC
AGATAATGGCATTGTAAGATGTGACAATGGCTTCAAAGGCAAACGCCCTCACGTCCAAGTGGAC
GTAAGGCTAACCCCTCAGGGTGAATCTCCTCTATAAACATTCCAGCACCTCAACCAGGCCAAATAA
TTCTCATCTGCCACCTCTCAATATCTCTAAGCAAATCCGAATATTAGTCCGCCATTGAAAAAA
TCTGCTCCAGAGGCCCTCCACCTTCAGCCTCAAGCAGCAATCATGATTGAAAAATTAGTCCCTCA
CAGACCTGTATAAGATCAAAGCGGAACATTAACAAAATACCGGATCCGTAGGTCCCTTCGAGGG
CCAGCTGAACATAATCGTCAGGTCTGCACGGACCAGCGGCCACTTCCCGCCAGGAACCTTGACAAA
AGAACCCACACTGATTATGACACCGATACTCGGAGCTATGCTAACAGCGTAGGCCCGATGTAAGCTTTG
TTGCATGGCGCGATATAAAATGCAAGGTGCTGCTAAAAAATCAGGCAAAGCCTCGCGAAAAAAAGAA
AGCACATCGTAGTCATGCTCATGCAAGATAAGGCAGGTAAGCTCGGAACCACACAGAAAAAGACACCA
TTTTCTCTCAAACATGTCAGGGTTCTGCATAAACACAAAATAACAAAAAAACATTAAACA
TTAGAAGCTGTCTTACAACAGGAAAACAACCCCTATAAGCATAAGACGACTACGCCATGCCGGT
GACCGTAAAAAAACTGGTCAACCGTATTAAAAGCACCACCGACAGCTCTCGGTATGTCGGAGTCAT
AATGTAAGACTCGTAAACACATCAGGTGATTACATCGTCAGTGCTAAAAGCGACCGAAATAGCCC
GGGGAATACATACCCGAGCGTAGAGACAAACATTACAGCCCCATAGGAGGTATAACAAAATAATAG
GAGAGAAAACACATAAACACCTGAAAAACCCCTCTGCTTAGGAAAATAGCACCTCCGCTCAGAAC
AACATACAGCGCTTCCACAGCGGCAGCCATAACAGTCAGCCTTACAGTAAAAAAGAAAACCTATTAAA
AAACACCACCTCGACACGGCACCAGCTCAATCAGTCACAGTGTTAAAAGGCCAGTGAGCGAGTAT
ATATAGGACTAAAAATGACGTTAACGGTTAAAGTCCACAAAAACACCCAGAAAACCCACGCAACCTA
CGCCCAGAACGAAAGCCAAAAACCCACAACCTCTCAAATCGTCACTCCGTTTCCCACGTACGTC
ACTTCCCATTAAAGAAAACCTACAATTCCAAACACATACAAGTTACTCCGCCCTAAACCTACGTACCC
GCCCGTCTCCACGCCCGCAGTCACAAACTCCACCCCTCATTATCATATTGCTTCAATCCAAA
ATAAGGTATTATTGATGATGTTAATTAAATTAAATCCGATGCGATATCGAGCTCCGGAAATTG
GATCTGCGACCGAGGCTGGATGGCCTTCCCTATTGATTCTCTCGCTCCGGCATCGGATGCC
CGCGTTGCAAGGCCATGCTGTCCAGGCAGGTAGATGACGACCATAGGGACAGCTCACGGCCAGAAAAG
GCCAGGAACCGTAAAAGGCCGCGTTGCTGGCTTTCCATAGGCTCCGGCCCTGACGAGCATCACA
AAAATCGACGCTCAAGTCAGAGGTGGCGAACCCGACAGGACTATAAGATACCAGGCGTTCCCGTGG
AAGCTCCCTCGCGCTCTCCTGTTCCGACCCCTGCCCTACGGATAACCTGTCGCCCTTCTCCCTCG
GGAAGCGTGGCGTTCTCAATGCTCACGCTGTAGGTATCTCAGTTGGTGTAGGCGTTGCTCCAAGC
TGGGCTGTGTCACGAAACCCCCGTTAGCCGACCGCTGCGCTTATCCGGTAACTATGCTTGTAGTC
CAACCCGGTAAGACACGACTTATGCCACTGGCAGCAGCACTGGTAACAGGATTAGCAGAGCGAGGTAT
GTAGGCGGTGCTACAGAGTTCTGAAGTGGTGGCTAACTACGCTACACTAGAAGGACAGTATTGGTA
TCTGCGCTCTGCTGAAGCCAGTTACCTTGGAAAAAGAGTTGGTAGCTTGTGATCCGGCAAACAAACAC
CGCTGGTAGGGTGGTTTTTGTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGAT
CCTTGATCTTCTACGGGTCTGACGCTCAGGAAACACTCACGTTAAGGGATTGGTGTGATGA
GATTATCAAAAGGATCTCACCTAGATCTTTAAATCAATCTAAAGTATATGAGTAAACTGGTCT
GACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTGTTCATCCATAGTTG
CCTGACTCCCCGTCGTGAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGTGCAATGAT
ACCGCGAGACCCACGCTCACCGGCTCCAGATTATCAGCAATAAACCAGCCAGCCGAAGGGCCGAGCGC
AGAAGTGGTCTGCAACTTATCCGCTCCATCCAGTCTATTAAATTGTTGCCGGGAAGCTAGAGTAAGTA
GTCGCCAGTTAATAGTTGCGCAACGTTGTTGCCATTGNTGCGAGGCATCGTGTGTCAGCTCGTGT
TGGTATGGCTTCAATTGCTCCGGTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAA
AAAGCGGTTAGCTCCTCGGTCTCCGATCGTTGTCAGAAGTAAGTTGGCCGAGTGTGTTATCACTCATGG
TTATGGCAGCACTGCATAATTCTTACTGTCATGCCATCCGTAAGATGCTTTCTGTGACTGGTAGTA
CTCAACCAAGTCATTCTGAGAATAGTGATGCGGGCAGCGAGTTGCTTGTGCCCCGGTCAACACGGGAT
AATACCGCGCCACATAGCAGAACCTTAAAGTGTCTCATATTGAAAACGTTCTCGGGCGAAAACCTCT
CAAGGATCTACCGCTGGTAGATCCAGTCAGTTGATGTAACCCACTCGTGCACCCACTGATCTTCAGCATC

Table 10 (continued) Nucleotide sequence of pAd/PL-DEST™ (SEQ ID NO: 87).

TTTTACTTCACCAGCGTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGATAAGG
GCGACACGGAAATGTTGAATACTCATACTCTTCAATATTATTGAAGCATTATCAGGGTTATT
GTCTCATGAGCGGATACATATTTGAATGTATTAGAAAAATAACAAATAGGGGTTCCGCGCACATTCC
CCGAAAAGTGCCACCTGACGTCTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGGCATTC
ACGAGGCCCTTCGTCTCAAGGATCCGAATTCCCAGAGCTCGATATCGCATGCGGATTAAATTAA
TTAA

Please amend Table 11 on pages 385-394 as follows:

Table 11: Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™ (SEQ ID NO: 88).

CATCATCAATAATACCTTATTGGATTGAAAGCCAATATGATAATGAGGGGGTGGAGTTGTGACGTG
GCGCGGGCGTGGAACGGGGCGGTGACGTAGTAGTGTGGCGAAGTGTGATGTTGCAAGTGTGGCGGA
ACACATGTAAGCGACGGATGTGGCAAAAGTGACGTTTGGTGTGCGCCGGTGTACACAGGAAGTGACAA
TTTCGCGCGTTTAAAGCGGATGTTGAGTAAATTGGCGTAACCGAGTAAGATTGCCATTTCGC
GGGAAAAGTGAATAAGAGGAAGTGAATCTGAATAATTGTGTTACTCATAGCGCGTAATATTGTCTA
GGGCCGCGGGACTTGACCGTTACGTGGAGACTCGCCCAGGTGTTTCTCAGGTGTTCCCGCGTTC
CGGGTCAAAGTTGGCGTTTATTATTAGTCAGTCGAAGCTGGATCCGGTACCTCTAGAATTCTCGAG
CGGCCGCTAGCGACATCGGATCTCCGATCCCCTATGGTCGACTCTCAGTACAATCTGCTCTGATGCCGC
ATAGTTAACGCCAGTATCTGCTCCCTGCTGTGTTGGAGGTGCTGAGTAGTGCGCGAGCAAAATTAA
GCTACAAACAGGCAAGGCTTGACCGACAATTGCAATGAAGAATCTGCTTAGGGTTAGGCCTTTCGCGCTGC
TTCGCGATGTACGGGCCAGATATACGCGTTGACATTGATTATTGACTAGTTATTAAATAGTAATCAATTAC
GGGGTCATTAGTTCATAGCCATATATGGAGTTCCGCGTTACATAACTTACGGTAATGGCCCGCCTGGC
TGACCGCCCCAACGACCCCCCGCCATTGACGGTCAATAATGACGTATGTTCCATAGTAACGCCAATAGGGA
CTTCCATTGACGTCAATGGGTGAACTATTACGGTAAACTGCCACTTGGCAGTACATCAAGTGTATCA
TATGCCAAGTACGCCCTATTGACGTCAATGACGGTAATGGCCCGCTGGCATTATGCCAGTACATG
ACCTTATGGGACTTCCCTACTTGGCAGTACATCTACGGTATTAGTCATCGCTATTACCATGGTATGCGGT
TTGGCAGTACATCAATGGCGTGGATAGCGGTTGACTCACGGGATTCCAAGTCTCCACCCATTGA.
CGTCAATGGAGTTGTTGGCACC AAAATCAACGGACTTCCAAAATGTCGAACAACTCCGCCCCA
TTGACGCAAATGGCGGTAGGCGTGTACGGTGGAGGTCTATATAAGCAGAGCTCTGGCTAACTAGAG
AACCCACTGCTTACTGGTTATCGAAATTAAACGACTCACTATAGGGAGACCAAGCTGGCTAGTTAAG
CTATCAACAAAGTTGTACAAAAAAGCAGGCTCCGCGCCCTTCAACATGATAGATCCCCTCGTT
TACAACGTCGTGACTGGAAAACCTGGCTTACCCAACCTTAATGCCCTTGCAAGCACATCCCCCTTCGC
CAGCTGGCGTAATAGCGAAGAGGCCGACCGATGCCCTCCAAACAGTTGCGCAGCCTGAATGGCGAA
TGGCGTTGCTGGTTCCGGCACAGAAGCGGTGCCGAAAGCTGGCTGGAGTGCATCTCTGAGG
CCGATACTGTCGTGCTCCCTCAAACCTGGCAGATGCA CGGTTACGATGCCCATCTACACCAACGTAAC
CTATCCCATTACGGTCAATCCGCCATTGTTCCACGGAGAATCCGACGGTTGTTACTCGCTCACATT
AATGTTGATGAAAGCTGGCTACAGGAAGGCCAGACCGAATTATTTTGATGGCGTTACTCGCGTTTC
ATCTGTGGTGCAACGGCGCTGGGCGTTACGGCCAGGACAGTCGTTGCCGTCTGAATTGACCTGAG
CCCATTTTACGCGCCGGAGAAAACGCCCTCGCGGTATGGTGTGCTGGTGGAGTACGGCAGTATCTG
GAAGATCAGGATATGTGGCGATGAGCGGATTTCCGTGACGCTCGTTGCTGCATAAAACCGACTACAC
AAATCAGCGATTCCATGTTGCCACTCGCTTAATGATGATTTCAGCCCGCTGTACTGGAGGCTGAAGT
TCAGATGTGCGCGAGTTGCGTGA CACTACGGGTAACAGTTCTTATGGCAGGGTAAACGCGAGGTC
GCCAGCGCACCGCGCTTCCGGCGTGAATTATCGATGAGCGTGGTGGTTATGCCATCGCTCACAC
TACGTCTAACGTCAAAACCGAAAATGTGGAGCGCAGCTGATTGAAGCAGAAGCCTGCGATGTCGTTCCG
ACTGCACACCGCCGACGGCACGCTGATTGAAGCAGAAGCCTGCGATGTCGTTCCCGAGGTGCGGATT
AAAAATGGCTGCTGCTGCTGAAACGGCAAGCCGTTGCTGATTGAGGCGTTAACCGTCACGAGCATCATC
CTCTGCATGGTCAAGTCATGGATGAGCGAGACGATGGTGCAGGATATCCTGCTGATGAAGCAGAACAACTT
TAAACGCCGTGCGTGTGCAATTACCGAACCATCCGCTGTTGACCGCTGCGACCGCTACGGCCTG
TATGTGGGGATGAAGCCAATTGAAACCCACGGCATGGTGCCTAATGAATCGCTGACCGATGATCCGC
GCTGGCTACCGCGATGAGCGAACCGTAACGCGAATGGTGCAGCGCAGTCGAATCACCGAGTGTGAT
CATCTGGTCCCTGGGGAAATGAATCAGGCCACGGCGCTAATCACGACGCCGTGATCGCTGGATCAAATCT
GTCGATCCTTCCGCCGGTGCAGTATGAAGGGCGGAGCGACACCACGGCCACCGGATATTATGGC
CGATGTACGCGCGCTGGATGAAGACCAGCCCTCCCGCTGCGGAAATGGTCCATCAAAAATGGCT
TTCGCTACCTGGAGAGACCGCGCCCGCTGATCCTTGCAATACGCCACCGGATGGTAACAGTCTTGGC
GGTTTCGCTAAATACTGGCAGGGCTTTCGTCAGTATCCCGTTACAGGGGGCTTGTCTGGGACTGGG
TGGATCAGTCGTGATTAATATGATGAAAACGGCAACCGTGGCTACGGCGTGTGATTTTGGCGA
TACGCCGAACGATGCCAGTTCTGTATGAACCGTCTGGCTTTGCCGACCGCACGCCATCCAGCGCTG
ACCGAAGCAAACACCGAGCAGCAGCTTCCAGTTCCGTTATCCGGGAAACCATCGAAGTGACCGAGCG
AATACCTGTCGTCAAGCGATAACGAGCTCTGCACTGGATGGTGGCGTGGATGTTAAGCCGCTGGC
AAGCGGTGAAGTGCCTCTGGATGTCGCTCCACAAAGTAAACAGTTGATTGAACTGCCCTGAAACTACCGCAG
CCGGAGAGCGCCGGCAACTCTGGCTCACAGTACGCGTAGTGCAACCGAACCGCACCGCATGGTCAGAAG
CCGGGACATCAGCGCCTGGCAGCAGTGGCGTCTGGCGAAAACCTCAGTGTGACGCTCCCCGCGCGTC
CCACGCCATCCCGCATCTGACCACCGGAAATGGATTTTGCACTCGAGCTGGGTAATAAGCGTTGGCAA

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™
(SEQ ID NO: 88).

TTAACCGCCAGTCAGGCTTCTTCACAGATGTGGATTGGCGATAAAAACAAC TGCTGACGCCGCTGC
GCGATCAGTCACCCGTGCACCGCTGGATAACGACATTGGCGTAAGTGAAGCGACCCGATTGACCCCAA
CGCCTGGGTCGAACGCTGGAAGGCCGGCATTACCAGGCCAAGCAGCGTGTGCAGTGACGGCA
GATACACTTGCTGATGCCGTGCTGATTACGACCGCTACCGCTGGCAGCATCAGGGAAAACCTTATTAA
TCAGCCGAAAACCTACCGGATTGATGGTAGTGGTCAAATGGCATTACGTTGATGGTAGTGGCAG
CGATACACCGCATCCGGCGGGATTGCCCTGAACTGCCAGCTGCCAGGTAGCAGAGCGGGTAAACTGG
CTCGGATTAGGGCGCAAGAAAACATCCCACCGCTTACTGCCCTGTTTGACCGCTGGGATCTGC
CATTGTCAGACATGTATACCCGTACGTCTCCGAGCAAAACGGTCTGCCCTGCCGGACGCCGAATT
GAATTATGCCACACCAGTGGCGGGCAGTCAACATCAGCCCTACAGTCAACAGCAACTG
ATGGAAACCAGCCATGCCATCTGCTGCACGCCAAGAAGGCACATGGCTGAATATCGACGGTTCCATA
TGGGGATTGGTGGCAGCAGCTCTGGAGCCGTCAGTATCGGCCAGTGCAGCGCCGGTCGCTA
CCATTACCAAGTTGGTCTGGTGTAAAAAAACTAAGGGTGGCGCCGACCCAGCTTCTGTACAAAGTG
GTTGATCTAGAGGGCCCGCGGTTGAAAGGTAAGCCTATCCCTAACCTCTCCTCGGTTCTGATTCTACGC
GTACCGGTTAGTAATGAGTTAACGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAAGGAA
CCCGCCTATGACGGCAATAAAAGACAGAATAAAACGCACGGGTGTTGGTCGTTGTTCTGATAAACCGC
GGGTTGGTCCCAGGGCTGGCACTCTGCGATACCCACCGAGACCCATTGGGCAATACGCCCGCGT
TTCTCCTTTCCCCACCCCCACCCCCAAGTCGGGTAAGGCCAGGGCTCGCAGCCAACGTGGGGCG
GCAGGCCCTGCCATAGCAGATCCGATTGACAGATCACTGAAATGTGTGGCGTGGCTTAAGGGTGGGAA
AGAATATATAAGGTGGGGCTTATGTAGTTGTATCTGTTGAGCAGCCGCCGCATGAGCAC
CAACTCGTTGATGGAAGCATTGAGCTCATATTGACAACGCCATGCCCATGGCGGGGTGCGT
CAGAATGTGATGGCTCCAGCATTGATGGTCGCCCTCGCCGCAAACCTACTACCTGACCTACG
AGACCGTGTGGAACGCCGTTGGAGACTGCAGCCTCCGCCGCTTCAGCCGCTGCAGCACGCCG
CGGGATTGTGACTGACTTGCCTTGAGCCCGCTTGCAAGCAGTGCAGCTCCGTTCATCCGCCG
GATGACAAGTTGACGGCTCTTGGCACAATTGGATTCTGACCCGGAACTTAATGTCGTTCTCAGC
AGCTGTTGGATCTGCCAGCAGGTTCTGCCCTGAGGCTTCCCTCCCAATGCCGTTAAACAT
AAATAAAAACAGACTCTGTTGGATTGGATCAAGCAAGTGTCTGCTGTTTACAAAGCGGTTAAGCT
CGCGCGGGTAGGCCGGGACCGCGCTCGGTGTTGAGGGCTCTGTGTATTTTCCAGGACGTGGT
AAAGGTGACTCTGGATGTTGAGATACATGGGCATAAGCCCGTCTGGGGTGGAGGTAGCACCACG
AGCTTCATGCTGCCGGGGTGGTGTAGATGATCCAGTGTAGCAGGAGCCGCTGGCGTGGCTAA
ATGTCTTCAGTAGCAAGCTGATTGCCAGGGCAGGCCCTGGTGTAAAGTGTACAAAGCGGTTAAGCT
GGGATGGGTGCATACGTGGGATATGAGATGCATCTGGACTGTATTTTGGCTATGTTCCAGC
CATATCCCTCCGGGATTATGTTGTCAGAACCCAGCACAGTGTATCCGGTGCACCTGGAAATTG
TCATGTTAGCTAGAAGGAAATGCGTGGAAAGAACTTGGAGACGCCCTGTGACCTCCAAGATTTCCATGC
ATTGCTCCATAATGATGCCATGGCCCACGGCGGCCCTGGCGAAGATATTCGGATCACTAAC
GTCATAGTTGTTCCAGGATGAGATGTCATAGGCCATTAAACAGCGGGCGAGGGTGCAGAC
TGGGTATAATGGTTCCATCCGGCCAGGGCGTAGTTACCTCACAGATTGCAATTCCCACGCTTGA
GTTAGATGGGGGATCATGTCACCTGCCGGCGATGAAGAAAACGGTTCCGGGTAGGGAGATCAG
CTGGGAAGGAAAGCAGGTTCTGAGCAGCTGCAGCTACCGCAGCCGTTGGCCCGTAAATCACACCTATT
ACCGGGTCAACTGGTAGTTAACAGAGAGCTGCAGCTGCCGTACCCCTGAGCAGGGGGCCACTCGTAA
GCATGTCCTGACTGCATGTTCCCTGACCAAATCCGCCAGAAGGCCCTGCCAGCGATAGCAG
TTCTGCAAGGAAGCAAAGTTTCAACGGTTGAGACCGTCCCGTAGGCATGTTGAGCGTTGA
CCAAGCAGTCCAGGGCTCCACAGCTCCGTACCTGCTCACGGCATCTCGATCCAGCATATCTCCTC
GTTTCGGGGTTGGGGCGTTGCTGTACGGCAGTAGTCGGTGTCTCCAGACGGGCCAGGGTCA
TCTTCCACGGCGCAGGGCTCTCGTCAGCGTAGTCTGGGTCAAGGTGAAGGGGTGGCTCCGGCT
CGCTGGCCAGGGTGCCTGAGGCTGGTCTGTTGCTGAAGCGCTGCCGGTCTTCGCCCTGCCGTC
GGCCAGGTAGCATTGACCATGGTGTACAGTCCAGGCCCTCCGCCGGTGGCCCTTGGCGCAGCTG
CCCTGGAGGGAGGCCAGGCCAGAGGGCAGTGCAGACTTTGAGGGCGTAGAGCTTGGCGAGAAATA
CCGATTCCGGGGAGTAGGCATCCGGCCGCCAGGCCCGAGACGGTCTCGCATTCCACGAGCCAGGTGAG
CTCTGGCCGTTGGGTCAAAACAGGTTCCCCCATGTTTGTGCGTTCTTACCTCTGTTCC
ATGAGCCGGTGTCCACGCTCGGTGACAAAAGGCTGTCCGTGTCCTGATACAGACTTGAGAGGCC
CCTCGAGCGGTGTTCCGGCTCTCGTCAGTAAAGAACCTCGGACCAACTCTGAGACAAAGGCTCGCT
GGCCAGCAGGAAGGAGGCTAAGTGGAGGGTAGCGGTCGTTGCAACTAGGGGGTCACTCGCT
GTGTGAAGACACATGTCGCCCTTCGGCATCAAGGAAGGTGATTGGTTGTAGGTGAGGCCACGTGAC
CGGGTGTCTGAAGGGGGCTATAAAAGGGGTGGGGCGCTCGTCCACTCTTCGCTCG

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™
(SEQ ID NO: 88).

GTCTGCGAGGGCCAGCTGTTGGGTGAGTACTCCCTCTGAAAAGCGGGCATGACTTCGCGCTAAGATTG
TCAGTTCCAAAAACGAGGAGGATTGATATTCACCTGGCCCGGGTAGCCTTGAGGGTGGCCGCAT
CCATCTGGTCAGAAAAGACAATCTTTGTTGTCAGCTGGGGCAACGACCCGTAGAGGGCGTTGGA
CAGCAACTTGGCGATGGAGCGCAGGGTTGGGTTTGTGCGATCGGCGCCTCCTGGCCGCATGTT
AGCTGCACGTATTGCGCGAACGACCCGCACTGGGAAAGACGGTGGTGCCTCGTGGGACCAGGT
GCACGCGCCAACCGCGGTTGTGCAAGGTCAACGCTGGTAGCCTCTCCGCGTAGGCCTC
GTTGGTCCAGCAGAGGCCGCGCCCTGCGCAGCAGAATGGCGTAGGGGTCTAGCTGCGTCTCGTCC
GGGGGGTCTGCGTCCACGGTAAAGACCCCCGGCAGCAGGCGCGCTGAAGTAGTCTATCTGCATCCTT
GCAAGTCTAGCGCCTGCTGCCATGCGCGGGCAAGCGCGCCTCGTATGGGTTGAGTGGGGACCCCA
TGGCATGGGGTGGGTGAGCGCGGAGGCGTACATGCCCAAATGCGTAAACGTAGAGGGCTCTGAGT
ATTCCAAGATATGAGGGTAGCATCTCCACCGCGGATGCTGGCGCGACGTAATCGTATAGTTGCG
AGGGAGCGAGGAGGTGGGACCGAGGTTGCTACGGGCGGCTGCTGCTCGGAAGACTATCTGCGTAA
GATGGCATGTGAGTTGGATGATATGGGTTGACGCTGAAAGACGTTGAAGCTGGCGTCTGTGAGACCTACC
GCGTCACGACGAAGGAGGCGTAGGAGTCGCGCAGCTTGTGACCAGCTGGCGGTGACCTGACGTCTA
GGCGCAGTAGTCCAGGGTTCTGATGATGTCATACTTATCTGCTCCCTTTTCCACAGCTCGCG
GTTGAGGACAAACTCTCGCGGTTCTCAGTACTCTGGATCGGAAACCGCTGGCCTCCGAACGGTAA
GAGCCTAGCATGTAGAACTGGGTTGACGGCTGGTAGGCGCAGCATCCCTTCTACGGGTAGCGCGTATG
CCTGCGCGGCCCTCCGGAGCGAGGTTGGGTGAGCGCAAAGGTGTCCTGACCATGACTTGAGGTA
GTATTGAGTCAGTGTGCGATCCGCGCTGCTCCCAGAGCAAAAGTCCGTGCGCTTTTGGAACGC
GGATTGAGGACAAACTCTCGCGGTTCTCAGTACTCTGGATCGGAAACCGCTGGCCTCCGAACGGTAA
TGGCGGAAGGGTCCCGGCACCTCGGAACGGTTGTTAATTACCTGGCGGGAGCACGATCTGTCAAAGCC
GTTGATGTTGTCGGCCACAATGTAAGTCCAAGAAGCGCGGGATGCCCTGATGGAAGGCAATTNTTA
AGTTCCCTGAGGTGAGCTTCAAGGGAGCTGAGCCGTGCTGAAAGGGCCAGTCTGCAAGATGAG
GGTTGAGGACGAATGAGCTCCACAGGTACGGGCAATTAGCATTGCAAGGTGGTGCCTGGAAAGGTCT
AAACTGGCGACCTATGCCATTCTGGGTTGATGCAAGTAGAAGGTAAGCGGGCTTGTGTTCCAGCGG
TCCCACCAAGGTTCGCGCTAGGTCTCGCGCGCAGTCAGTAGAGGCTCATCTCCGCCAACTCATGA
CCAGCATGAAGGGCACGAGCTGCTCCAAAGGCCCATCCAAGTATAGGTCTCTACATCGTAGGTGAC
AAAGAGACGCTCGGTGCGAGGATGCGAGCCGATCGGAAGAACTGGATCTCCGCCACCAATTGGAGGAG
TGGCTATTGATGTTGAAAGTAGAAGTCCCTGCGACGGGCCAACACTCGTGTGGCTTTGTA
GTGCGCAGTACTGGCAGCGGTGACGGCTGTACATCTGCACGAGGTTGACCTGACGACCGCGCACAAG
GAAGCAGAGTGGGAATTGAGCCCTGCCCTGGCGGGTTGGCTGGTCTTCACTTCGGCTGCTTGT
CCTTGACCGTCTGGCTGCTCGAGGGAGTTACGGTGGATCGGACCACCACGCCGCGAGGCCAAAGTCC
AGATGTCGCCGCGCGGGCTGGAGCTTGTGATGACAACATCGCGCAGATGGAGCTGCCATGGTCTGGAG
CTCCCGCGGCTCAGGTCAAGGGAGCTCTGCAGGTTACCTGCATAGACGGTCAAGGGCGGGCT
AGATCCAGGTGATACCTAATTCAGGGCTGGTGGCGGGCTGATGGCTGCAAGAGGCCGATC
CCCGCGCGCAGTACGGTACCGCGCGGGCGTGGCGGGGGTGTCTTGATGATGCACTAA
AAGCGGTGACCGGGCGAGCCCCGGAGGTAGGGGGCTCCGGACCCGCCGGAGAGGGGGCAGGGCA
CGTCGGCGCCGCGCGCGGGCAGGAGCTGGTGTGCGCGCGTAGGTTGCTGGCAACCGCAGACGCCGCG
GTTGATCTCTGAACTCGGCGCTCTGCGTGAAGACGACGGGCCGGTAGGCTGAGCTGAAAGAGAGT
TCGACAGAATCAATTGCGTGTGTTGACGGCGGCCCTGGCAGAAATCTCCTGACGTCCTGAGTTGT
CTTGATAGGCAGTCGCGCATGAACTGCTCGATCTCTCTGGAGATCTCGCGTCCGGCTCGCTC
CACGGTGGCGCGAGGTGTTGAAATGCCGGCATGAGCTGGCAGAAGGGTTGAGGGCTCCCTCGTC
CAGACCGGGCTGTAGACCAAGCCCCCTTCCGCATCGGGCGCGCATGACCACTCGCGAGATGAGCT
CCACGTGCCGGCGAAGACGGCGTAGTTGCGAGGGCTGAAAGAGGTAGTTGAGGGTGGTGGCGGTGT
TTCTGCCACGAAGAAGTACATAACCCAGCGTCGCAACGTGGATTGTTGATATCCCCAAGGCCCAAGG
CGCTCCATGCCCTCGTAGAAGTCCACGGCAAGTTGAAAAACTGGAGTTGCGCGCCACCGGTTAACT
CCTCCTCCAGAAGACGGATGAGCTGGCGACAGTGTGCGCACCTCGCGCTCAAAGGCTACAGGGCCCTC
TTCTTCTCTCAATCTCCTCTTCCATAAGGGCCTCCCTCTCTTCTCTGCGGGCGGTGGGGAGGG
GGGACACGGCGCGACGACGGCCACCGGGAGGGCGTAGCAGCAAGCGCTCGATCATCTCCCGGGCGAC
GGCGCATGGTCTGGTGCAGGGCGGGCGTGCATCGGGCAGGGATACGGCGCTAACGATGCA
CCGGTTATGGGTTGGCGGGGGCTGCCATCGGGCAGGGATACGGCGCTAACGATGCA
TGTGAGGTACTCCGCCGAGGGACCTGAGCGAGTCCGCATCGACCGGATCGGAAACCTCTCGAGAA
AGCGTCTAACCAAGTCACAGTCAGGTAAGGCTGAGCACCCTGGCGGGCGAGCGGGCGGTGCGG
GTTGTTCTGGCGAGGTGCTGATGATGTAATTAAAGTAGGGCTTGTAGACGGGATGGTCAC

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/lacZ.PL-DEST™
(SEQ ID NO: 88).

AGAAGCACCATGTCCCTGGTCCGGCTGCTGAATGCGCAGGCGGTGGCCATGCCCAAGGCTTCGTTT
GACATCGGCGCAGGTCTTGATAGTCTTCATGAGCCTTCACCGGACTTCTTCTCCTCCTC
TTGTCCTGCATCTCTGCATCTATCGCTGCGCGGGCGGAGTTGGCGTAGGTGGCGCCCTTCC
CCCATGCCTGTGACCCGAAGCCCTCATCGCTGAAGCAGGGTAGGTGGCGACAACCGCTCGCTA
ATATGGCCTGCTGCACCTGCGTAGGGTAGACTGGAAGTCATCCATGTCCACAAAGCGGTGGTATGCGCC
CGTGTGATGGTAAAGTGCAGTTGGCATAACGGACCAGTTAACGGTCTGGTACCCGGCTGCGAGAGC
TCGGTGTACCTGAGACCGAGTAAGCCCTCGAGTCAAATACGTAGTCGTTCAAGTCCGACCAGGTACT
GGTATCCCACCAAAAGTGCAGGGCGGCTGGCGTAGAGGGCCAGCGTAGGGTGGCGGGCTCC
GGCAGATCTTCCAACATAAGGCATGATATCCGTAGATGTACCTGGACATCCAGGTGATGCCGGCG
GTGGTGGAGGGCGCGGGAAAGTCGCGGACCGGGTCCAGATGTTGCGCAGCGGAAAAAGTGTCCATGG
TCGGGACGCTCTGGCCGGTCAGGCGCGCAATCGTTGACGCTTAGACCGTGAAAAGGAGAGCCTGTA
AGCGGGCACTCTTCCGTGGTCTGGTGGATAAAATTGCAAGGGTATCATGGCGACGACCGGGTTCGAGC
CCCGTATCCGGCGTCCGCGTGATCCATGCGGTTACCGCCCGTGTGAAACCCAGGTGCGACGTCA
GACAACGGGGAGTGTCTCTTTGGCTTCCAGGCGCGGGCTGCGCTAGCTTTTGCCAC
TGGCCGCGCGCAGCGTAAGCGTTAGGCTGAAAGCGAAAGCATTAAAGTGGCTCGCTCCCTGTAGCCGA
GGGTTATTTCAAGGGTTGAGTCGCGGGACCCCGGTTGAGTCTGGACCGGGCCGACTGCGCGAAC
GGGGGTTGCGCTCCCGTCACTGCAAGACCCCGCTTGCACAAATTCTCCGAAACAGGGACGAGCCCTTT
TTGCTTTCCAGATGCACTCGGTGCTGCGGAGATGCGCCCCCTCCTCAGCGCGAACAGAGCAAGAG
CAGCGGCAAGACATGCAAGGGCACCCCTCCCTACCGCGTCAAGGAGGGCGACATCCGCGGTTGACG
CGCGCAGCAGATGGTATTACGAAACCCCGGGCGCCGGGCGACTACCTGGACTTGGAGGAGGGCGA
GGGCCTGGCGCGCTAGGAGCGCCCTCTCTGAGCGTACCCAAAGGTGCAAGCTGATACCGT
GAGCGTACGTGCCCGCGCAGAACCTGTTGCGCACCGCGAGGGAGAGGAGCCGAGGAGATGCCGATC
GAAAGTCCACGCAGGGCGCAGCTGCGGATGGCTGAATCGGAGCGGGTGTGCGCGAGGAGGACTT
TGAGCCCAGCGCGAACCGGGATTAGTCCCGCGCGCACACGTGGCGGGCGGACCTGGTAACCGCA
TACGAGCAGACGGTGAACCAGGAGATTAACCTTCAAAAAAGCTTAACAAACCACGTGCGTACGCTTGTGG
CGCGCGAGGAGGTGGCTAGGACTGATGCACTGTGGGACTTGTAAAGCGCGTGGAGCAAAACCCAAA
TAGCAAGCCGCTCATGGCGCAGCTGTTTATAGTCAGCACAGCAGGGACAACGAGGCATTAGGGAT
GCGCTCTAAACATAGTAGAGCCGAGGGCCGCTGGCTGCTGATTGATAAACATCTGCAGAGCATAG
TGGTGCAGGAGCGCAGCTTGAGCCTGGCTGACAAGGTGGCCCATCAACTATTCCATGCTTAGCCTGGG
CAAGTTTACGCCCGCAAGATATACCATACCCCTAACGTTCCATAGACAAGGAGTAAAGATCGAGGG
TTCTACATGCGCATGGCGCTGAAGGTGTTACCTTGAGCGACGACCTGGCGTTATCGCAACGAGCGCA
TCCACAAGGCCGTGAGCGTGGCGCGCGAGCTCAGCGACCGCGAGCTGATGCAACAGCCTGCAAAG
GGCCCTGGCTGGCACCGGCAGCGCGATAGAGAGGCCGAGTCCTACTTGACGCGGGCGTGAACCTGCGC
TGGGCCCAAGCCGACCGCGCCCTGGAGGCAGCTGGGCCGGACCTGGCTGGCGTGGCACCCCGCGCG
CTGGCAACGTCGGCGGTGGAGGAATATGACGAGGACGATGAGTACGAGGCCAGAGGACGGCGAGTACTA
AGCGGTGATGTTCTGATCAGATGATGCAAGACGCAACGGACCCGGTGGCGGCGCTGAGAGCC
AGCGTCCGGCCCTAACCTCCACGGACGACTGGCGCCAGGTATGGACCGCATATGCGCTGACTGCGCG
CAATCCTGACCGCTTCCGGCAGCGCAGGCCAACCGGCTCTCGCAATTCTGGAAGCGGTGGTCCCG
GCGCGCAGAACCCACGCACGAGAAGGTGCTGGCGATCGTAAACCGCTGGCGAAAACAGGGCATCC
GGCCCGACGAGGCCGGCTGGCTACGACCGCGTGGCTCAGCGCGTGGCTGTTACAACAGCGGCAACGT
GCAGACCAACCTGGACCGGCTGGGGGATGTGCGCGAGGCCGAGCGTGGCGAGCGCGCAGCAG
CAGGGCAACCTGGCTCCATGGTTGCACTAAACGCCCTCTGAGTACACAGCCCAGCGAACGTGCCGCG
GACAGGAGGACTACACCAACTTGTGAGGCCACTGCGGTAATGGTACTGAGACACCGCAAAGTGAGGT
GTACCAAGTGTGGCCAGACTATTTTCCAGACCGAGTAGACAAGGCCGAGACCGTAAACCTGAGCCAG
GCTTCAAAACTTGCAAGGGCTGTGGGGGATGTGCGCGAGGCCGAGCGTGGCTAGCT
TGCTGACGCCAACCTCGCGCTGTTGCTGCTGTAATAGGCCCTCACGGACAGTGGCAGCGTGTCCCG
GGACACATACCTAGGTCACTTGTGACACTGTACCGCGAGGCCATAGGTGAGCGCATGTGGAGGAGCAT
ACTTCCAGGAGATTACAAGTGTGAGCCGCGCTGGGGCAGGAGGACACGGGAGCCTGGAGGCAACCC
TAAACTACCTGCTGACCAACCGGGCAGAAGATCCCTCGTTGCACTGTTAACAGCGAGGAGGAGCG
CATTTTGCCTACGTGCAAGCGTGGCTAACCTGATGCGCAGCGGTAACGCCAGCGTGGCG
CTGGACATGACCGCGCAACATGGAACCGGGCATGTATGCCCTAACCGGCCGTTATCAACCGCTAA
TGGACTACTGCACTCGCGGGCCGCGTGAACCCCGAGTATTCAACATGCCCTGAAACCCGACTG
GCTACCGCCCCCTGGTTCTACACCGGGGATTGAGGTGCCCCAGGGTAACGATGGATTCCCTGGGAC
GACATAGACGACAGCGTGTGTTCCCCGCAACCGCAGACCGTAGAGTTGCAACAGCGCGAGCAGGAG

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™
(SEQ ID NO: 88).

AGGC GGCGCTG CAAAGGAAAGCTTCCG CAGGCCAAGCAGCTTGTCGATCTAGGCCTGCGGCCCGCG
GTCAGATGCTAGTAGCCCATTCCAAGCTTGATAGGGTCTTACCAAGCAGCTCGCACCAACCCGCCGCG
CTGCTGGCGAGGAGGAGTACCTAAACAACCTCGCTGCAGCCGAGCGGAAAAAAACTGCTCCGG
CATTTCCCAAACAACGGGATAGAGAGCCTAGTGGACAAGATGAGTAGATGGAAGACGTACGCGCAGGAGCA
CAGGGACGTGCCAGGCCGCCACCGCTGTCAAAGGCACGACCGTCAGCGGGTCTGGTGTGG
GAGGACGATGACTCGGCAGACGACAGCAGCGTCCTGGATTGGAGGGAGTGGCAACCCGTTGCGCACC
TTCGCCCCAGGCTGGGGAGAATGTTTAAAAAAAAAAAGCATGATGCAAATAAAAACCTCACCAAGGC
CATGGCACCGAGCGTTGGTTTCTTGATTCCCTTAGTATGCGGCGCGCGGCGATGTATGAGGAAGGTC
CTCCCTCCCTCTACGAGAGTGTGGTGAGCGCGGCCAGTGGCGCGCGCTGGGTTCTCCCTCGATGC
TCCCCTGGACCCGCCGTTGTGCCTCCGCCGTACCTGCCCTAACGGGGGAGAAACAGCATCCGTTAC
TCTGAGTTGGCACCCCTATTGACACCAACCCGTGTGACCTGGTGACAACAAGTCAACGGATGTGGCAT
CCCTGAACCTACAGAACGACCACAGCAACTTCTGACCACGGTATTCAAACAAATGACTACAGCCCGGG
GGAGGCAAGCACACAGACCATCAATCTTGACGACCGGTGCACTGGGGCGCGACCTGAAAACCATCTG
CATACCAACATGCCAATGTGAACGAGTTACGTTACCAATAAGTTAAGGCGCGGGTGTGGTGTGC
GCTTGCCTACTAAGGACAATCAGGTGGAGCTGAAATACGAGTGGGTGGAGTTACGCTGCCGAGGGCAA
CTACTCCGAGACCATGACCATAGACCTTATGAAACAACCGCAGTGTGGAGCACTACTTGAAAGTGGCAGA
CAGAACGGGTTCTGAAAGCGACATCGGGTAAAGTTGACACCCGCAACTCAGACTGGGTTTGACC
CCGTCAGTGGCTTGTATGCCCTGGGTATATACAAACGAAGCCTCCATCCAGACATCATTGCTGCC
AGGATGCGGGGTGGACTTCACCCACAGCCCTGAGCAACTTGTGGGATCCGCAAGCGGCAACCCCTC
CAGGAGGGCTTGTGGGACTACGATGATCTGGAGGGTGGTAACATTCCGCACTGTTGGATGTGGACG
CCTTACCGAGCGCTTGAAGATGACACCGAACAGGGCGGGGGTGGCGCAGGCGGAGCAACAGCAGTGG
CAGCGCGCGGAAGAGAACTCCAACCGCAGCCGCCAATGCAAGCCGGTGGAGGACATGAACGATCAT
GCCATTGCGGGGACACCTTGCACACGGCTGAGGAGAACGGCAGTGAGGCGCAAGCAGCGGCCGAAG
CTGCGCCCCCGCTGCGAACCCGAGGTGAGAACGCTCAGAAGAAACCGGTGATCAAACCCCTGACAGA
GGACAGCAAGAAACGCAAGTTACAACCTAATAAGCAATGACAGCACCTCACCCAGTACCGCAGCTGGTAC
CTTGCACTACAACATACGGGACCCCTAGACCGGAATCCGCTATGGACCTGTTGACTCCTGACGTAA
CCTGCGGCTGGAGCAGGTCTACTGGTGTGCCAGACATGATGCAAGACCCGTGACCTTCCGCTCCAC
GGCCAGATCGCAACTTCCGGTGGCGCCAGCTGTTACCTCTGACCCACGTGTTCAATGCTTCCCG
GACCAGGGCGTCACTCCCAACTCATCCGCCAGTTACCTCTGACCCACGTGTTCAATGCTTCCCG
AGAACCGAGATTTGGCGGCCAGCCCCCACCATCACCAACCGTCAGTGGAAACGTTCTGCTCTCAC
AGATCACGGGACGCTACCGCTGCGAACACGACATGGAGGAGTCCAGCAGTGACCATTAACGCCCAGA
CGCCGCACCTGCCCTACGTTACAAGGCCCTGGGATAGTCTGCCGCGCTTATCGAGCCGCACTT
TTTGAGCAAGCATGTCATCCTTATATCGCCCAAGCAATAACACAGGCTGGGCTGCGCTTCCAAAGCAA
GATGTTTGGCGGGGCAAGAACGGCTCCGACCAACACCCAGTGGCGTGCGCGGGACTACCGCGGCC
TGGGGCGCACAACCGGCCACTGGCGCACCAACCGTCGATGACGCCATCGACCGGGTGGAGG
AGGCGCGCAACTACACGCCACGCCAGCTGTTACAGTGGACGCCATTCAAGACGTGGTGC
CGGAGCCCGCGCTATGCTAAAATGAAGAGACGGCGAGGCGCGTAGCACGTGCCACCGCGGCCACCC
GGCACTGCCGCCAACCGCGGGCGGCCCTGCTAACCGCGCACGTGCAACCGGCCACGGCGGCC
TGGGGCGCTCGAAGGCTGGCGGGTATTGTCAGTGTGCCCTTACGGTCCAGGCGACGAGGGCG
CGCAGCAGCCGCGGCCATTAGTGCTATGACTCAGGGTGCAGGGCAACGTGTATTGGGTGCGGACTCG
GTTAGCGGCTGCGCTGCGCACCCGCCCGCGCAACTAGATTGCAAGAAAAAAACTACTTAG
ACTCGTACTGTTGATGATCCAGCGGGCGCGCAACGAAGCTATGCTAACGCGCAAATCAAAGA
AGAGATGCTCCAGGTACCGCCGGAGATCTATGGCCCCCGAAGAAGGAAGGAGCAGGATTACAAGCCC
CGAAAGCTAAAGCGGGTCAAAAGAAAAAGAAAGATGATGATGAACTTGACGACGGTGGAACTGC
TGCACGCTACCGGCCAGCGACGGTACAGTGGAAAGGTGACGCGTAAACGTTGCGACCCGG
CACCAACCGTAGTCTTACGCCGGTGAGCGCTCCACCCGACCTACAAGCGCTGATGAGGTGTAC
GGCGACGAGGACCTGCTTGAGCAGGCCAACGAGCGCTCGGGAGTTGCGTACGGAAAGCGGCATAAG
ACATGCTGGCTTGCGCTGGACGGAGGCAACCCAAACACCTAGCTTAAAGCCGTAACACTGCA
GCTGCCCGCGCTTGCGCACCGTCCGAAGAAAAGCGCGCTTAAAGCGCGAGTCTGGTACTGGCACCCACC
GTGCAAGCTGATGGTACCCAGCGCCAGCGACTGGAAAGATGTCCTGGAAAAAAATGACCGTGGAACTGGC
TGGAGCCGAGGTCCCGTGCAGGCCATCAAGCAGGTGGCGGGACTGGCGTGCAGACCGTGGACGT
TCAGATACCCACTACCAAGTAGCACCAGTATTGCCACCGCCACAGAGGGCATGGAGACACAAACGCCCCG
GTTGCCTCAGCGGTGGCGATGCCGCGTGCAGCGGTGCTGCCGCGTCCAAGACCTCTACGGAGG
TCAAAACGGACCCGTGGATGTTGCGTTCAAGCCCCCGCGCCCGCGGGTGTGGAGGAAGTACGGCGC

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™ (SEQ ID NO: 88).

CGCCAGCGCGCTACTGCCGAATATGCCCTACATCCTTCCATTGCGCTACCCCCGGCTATCGTGGCTAC
ACCTACCGCCCCAGAAGACGAGCAACTACCCGACGCCAACCACTGGAACCCGCCGCCGCTGCC
GTCGCCAGCCGTGCTGGCCCCGATTTCCGTGCGCAGGGTGCTCGGAAGGAGGCAGGACCTGGTGC
GCCAACAGCGCGTACCAACCCAGCATGTTAAAAGCCGGCTTTGTGGTCTTGCAGATATGCCCTC
ACCTGCCGCTCCGTTCCGGGATTCGAGGAAGAATGCACTGGTAGGAGGGCATGGCCGGC
ACGGCCTGACGGGGGGCATGGCTGCGCACCAACCGCGGGCGCGCGTCGCACCCTGCATGCCGG
CGGTATCTGCCCTCTTATTCCACTGATGCCCGGGCATTGGCGCGTGCCTGGAAATTGCATCCGT
GCCTTGAGGCGAGAGACACTGATTAAAACAAGTGCATGTGGAAAAATCAAATAAAAGTCTGGAC
TCTCACGCTCGCTGGTCTGTAACTATTTGAGAATGGAAGACATCAACTTGCCTCTGGCCCCCG
GACACGGCTCGCGCCCGTTCATGGAAACTGGCAAGATATCGGACCCAGCAATATGAGCGGTGGCGCCT
CAGCTGGGCTCGTGTGGAGGGCATTAAAATTGGTCCACCGTAAAGAACTATGGCAGCAAGGCC
TGGAACAGCAGCACAGGCCAGATGCTGAGGGATAAGTTGAAAGAGCAAATTCCAACAAAAGTGGTAG
ATGGCCTGGCCTCTGGCATTAGCGGGGTGGACCTGGCAACCAGGCAGTGCAAATAAGATTAACAG
TAAGCTGATCCCCGCCCTCCGTAGAGGAGCCTCACCGGCCGTGGAGACAGTGTCTCCAGAGGGCGT
GGCGAAAAGCGTCGCGCCCCGACAGGGAAAGAAACTCTGGTGACGCAAATAGACGAGCCTCCGTACG
AGGAGGACTAAAGCAAGGCTGCCACCAACCGTCCCCTCGGCCATGGCTACCGAGTGTGGCCA
GCACACACCGTAACGCTGGACCTGCCCTCCCCCGGCCACACCCAGCAGAAACCTGTGCTGCCAGGCC
ACCGCCGTTGTGTAACCGCTCTAGCCGCGTCCCTGCGCCGCCAGCGGTCCGCGATCGTGC
GGCCCGTAGCCAGTGGCAACTGGCAAAGCACACTGAACAGCATCGTGGGTCTGGGGTGCATCCCTGAA
GCGCCGACGATGCTCTGAATAGCTAACGTGTGTATGTGTGCATGTATGCGTCCATGCGCCAGA
GGAGCTGCTGAGCCCGCGCCGCGCCGCTTCCAAGATGGCTACCCCTTCGATGATGCCGAGTGGCTTA
CATGCACATCTCGGCCAGGACGCCCTGGAGTACCTGAGCCCCGGCTGGTGCAGTTGCCGCCACC
GAGACGTACTTCAGCCTGAATAACAAGTTAGAAACCCCACGGTGGCCCTACGCACGACGTGACCACAG
ACCGGTTCCAGCGTTGACGCGTGCCTGCATCCCTGTGGACCGTGAGGATACTGGCTACTCTACAAGGC
GCGGTTACCCCTAGCTGTGGGTATAACCGTGTGGACATGGCTTCACGTACTTGACATCCGCC
GTGCTGGACAGGGCCCTACTTTAACGCCCTACTCTGGCCTACGCCCTGGCTCCAAAGGGTG
CCCCAAATCTTGCATGGGATGAAGCTGACTGCTCTTGAATAAACCTAGAAGAAGAGGACGATGA
CAACGAAGACGAAGTAGACGAGCAAGCTGAGCAGAAAAACTCACGTATTGGGAGGCCCTTATTCT
GGTATAAAATTACAAAGGGTATTCAAATAGGTGCGAAGGTCAAACACCTAAATATGCCGATAAAA
CATTTCAACCTGAAACCTCAAATAGGAGAATCTCAGTGGTACGAAACTGAAATTAAATCATGCA
GCTGGAGAGTCTTAAAGACTACCCCAATGAAACCATGTTACGGTCTATGCAAAACCCACAAATGAA
GGGCAAGGCATTCTGTAAGCAACAAATGGAAGCTAGAAAGTCAAGTGGAAATGCAATTCTCAA
CTACTGAGGCGACCGCAGGCAATGGTGATAACTTGACTCTAAAGTGTATTGTACAGTGAAGATGTAGA
TATAGAAACCCCAGACACTCATATTCTTACATGCCACTATTAGGAAGGTAACTCAGGAGACTAATG
GCCCAACAATCTATGCCAACAGGCCATTACATTGCTTTAGGGACAATTATTGGTCTAATGTATT
ACAACAGCACGGTAATATGGTGTCTGGGGCCAAGCATCGCAGTGATGCTGTGTAGATTGCA
AGACAGAAACACAGAGCTTCTACCAAGCTTGTGATTCCATTGGTGTAGAACCCAGGTACTTTCT
ATGTGGAAATCAGGTGTTGACAGCTATGATCCAGATGTTAGAATTATTGAAATCATGGA
ACTTCCAATTACTGCTTTCACTGGAGGTGTGATTAATACAGAGACTCTACCAAGGTAAACCTAA
AACAGGTCAAGGAAATGGATGGAAAAAGATGCTACAGAATTTCAGATAAAATGAAATAAGAGTGG
AATAATTGCCCCATGGAAATCAATCTAAATGCCAACCTGTGGAGAAATTCTCTGACTCCAAACATAGCG
TGTATTGCCCCACAAGCTAAAGTACAGTCTTCAACGTAAAATTCTGATAACCCAAACACCTACCG
CTACATGAACAAGCGAGTGGGGCTCCGGGTTAGTGGACTGCTACATTACCTGGAGCACGCTGGTCC
CTTGACTIONATGGACAACGTCACCGCTTAAACCACCGCAATGCTGGCCTGCCCTACCGCTCAATGT
TGCTGGCAATGGCGCTATGTGCCCTCCACATCCAGGTGCCCTCAGAAGTTCTTGCCTTAAACCT
CTTCTCTGCCGGCTACACCTACGAGTGGAACTTCAGGAAGGATGTTAACATGGTCTGCAGAGC
TCCCTAGGAAATGACCTAAGGGTTGACGGAGCCAGCATTAAGTTGATAGCATTGCTTTACGCCACCT
TCTTCCCCATGGCCCACAACACCGCCTCACGCTGAGGCCATGCTTAGAAACGACCCAACGACAGTC
CTTTAACGACTATCTCTCCGCCAACATGCTCTACCCCTATACCGCCAACGCTACCAACGTGCCATA
TCCATCCCCCTCCCGCAACTGGCGGCTTCCGCGCTGGCCTCACGCCCTTAAGACTAAGGAAACCC
CATCACTGGCTCGGGCTACGACCCATTACACCTACTCTGGCTCTATACCCCTACCTAGATGGAACCTT
TTACCTCAACCACACCTTAAGAAGGGCATTACCTTGACTCTCTGTCAGCTGGCTGGCAATGAC
CGCCTGCTTACCCCCAACGAGTTGAAATTAAAGCGCTCAGTGACGGGGAGGGTACAAACGTTGCCAGT
GTAACATGACCAAAAGACTGGTCTGGTACAAATGCTAGCTAACTACAAACATTGGCTACCAAGGGCTTCTA

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™
(SEQ ID NO: 88).

TATCCCAGAGAGCTACAAGGACCGCATGTACTCCTCTTAACTCCAGCCATGAGCCGTAGGTG
GTGGATGATACTAAATACAAGGACTACCAACAGGTGGGCATCCTACACCAACACAACACTCTGATTG
TTGGCTACCTTGCCCCACCAGCGCGAAGGACAGGCCATCCCTGCTAACCTCCCTATCGCTTATAGG
CAAGACCGCAGTTGACAGCATTACCCAGAAAAAGTTCTTGGCATTGCGACCCCTTGGCGATCCCATTC
TCCAGTAACCTTATGTCATGGCGCACTCACAGACCTGGCCAAACCTCTACGCCAACCTCCGCC
ACCGCCTAGACATGACTTTGAGGTGGATCCATGGACGAGCCCACCCCTTATGTTGTTGAAGT
CTTGACGTGGTCCGTGCACCGGCCGACCGCGCGTCATCGAAACCGTGTACCTGCGCACGCCCTTC
TCGGCCGGCAACGCCAACACATAAAGAAGCAAGCAACATCAACAAACAGCTGCCCATGGCTCCAGTGA
GCAGGAACGTAAAGCATTGTCAAAGATCTGGTTGAGGCACTATTTTGGGCACCTATGACAAGC
TTTCCAGGCTTGTCTCCACACAAGCTCGCCTGCCATAGTCAATACGGCGGTGCGAGACTGGGG
GCGTACACTGGATGGCCTTGCCTGAAACCGCACTAAAAACATGCTACCTCTTGAGCCCTTGGCTT
TTCTGACCAGCGACTCAAGCAGGTTACAGGTTACAGGTTGAGTACGAGTCACCTCTGCGCCGTAGGCCATTGCT
TCTTCCCCGACCCTGTATAACGCTGGAAAAGTCCACCCAAAGCGTACAGGGGCCAACTCGGCCGCT
GTGGACTATTCTGCTGCATGTTCTCCACGCCCTTGCAACTGCCCAAACATCCCATGGATACAACCC
CACCATGAACCTTATTACGGGGTACCCAACCTCCATGCTAACAGTCCCCAGGTACAGCCCACCCCTGCGT
CGCAACCAGGAACAGCTCTACAGCCTCTGGAGCGCCACTGCCCTACTCCGAGCCACAGTGCAGCAGA
TTAGGAGGCCACTCTTTGTCACTTGAAAACATGTTAAATGACTAGAGACACTTTCAATAA
AGGCAAATGCTTTATTGTACACTCTCGGGTGAATTACCCCCACCCCTGCCGCTGCGCCGTTAA
AAATCAAAGGGTTCTGCCGCATCGCTATGCCACTGGCAGGGACACGTTGCGATACTGGTGTAA
TGCTCCACTAAACTCAGGCACAACCATCCGCGCAGCTCGGTGAAGTTCACCCACAGGCTGCGAC
CATCACCAACCGCTTAGCAGGTCGGCGCGATATCTGAAGTCGAGTGGGGCTCCGCCCTGCG
CGGAGTTGCGATACACAGGGTTCAGCAGCACTATCAGGCCGGTGGTGCAGCTGCCAGCA
CGCTCTTGTGGAGATCAGATCCGCTCCAGGTCTCCGCGTTGCTCAGGGCGAACGGAGTCACCTTG
TAGCTGCCTTCCAAAAAGGGCGCGTGGCAGGCTTGAGTTGACTCGCACCGTAGGGCATCAAAGG
TGACCGTGCCTGGTCTGGCGTTAGGATACAGCGCCTGCATAAAAGCCTGATCTGCTTAAAGCCACCT
GAGCCTTGCCTTCAGAGAAGAACATGCCAAGACTTGCGAAAAGTGAATTGGCGGACAGGCC
GTCGTGCACGCCAGCACCTGCGTCGGTTGGAGATCTGACCCACATTGGCCCCACCGGTTCTCAG
ATCTGGCTTGCCTAGACTGCTCCTCAGCGCGCTGCCGTTTCGCTCGTACATCCATTCAATCA
CGTGCCTTATTTATCATAATGCTCCGTAGACACTTAAGCTGCCCTCGATCTAGCGCAGCGTG
CAGCCACAACCGCAGCCGTGGCTCGTATGCCGAAACGACTGCCAGGTACGCC
TGCAGGAATGCCCATCGTCACAAGGTTGCTGGTGAAGGTAGCTGCAACCCGGTGCT
CCTCGTTAGCCAGGTCTTGCAACGCCAGAGCTTCACTGGTCAGGAGTAGTTGAAGTTGCG
CTTAGATCGTTATCCACGTGGTACTGTCATCGCGCGCCAGCCTCATGCCCTCTCCACGCA
GACACGATCGGCACACTCAGCGGGTCAACCGTAATTCACTTCCGCTCGTGGCTCTCCCT
CCTCTTGCCTCGCATAACCGGCCACTGGCTCGTCTCATTAGCCGCCACTGCGCTTACCTCC
TTGCCATGCTTGTAGACTGACCGGTGGTTGCTGAAACCCACCATTTGAGCGCCACATCTCTTTCT
TCCTCGCTGTCACGATTACCTCTGGTATGGCGGGCGCTGGCTTGGGAGAAGGGCGTTCTTTCT
TCTTGGCGCAATGGCAAATCCGCCGAGGTGATGGCGGGCTGGTGTGCCGGCACCAGCG
GTCTGTGATGAGTCTCCTCGTCGACTCGATACGCCCTCATCCGTTTTGGGGCGCCGG
GGAGGGCGCGCGACGGGACGGGACGACACGTCCTCATGGTGGGGAGCTCGGCCCGCACCGCGTC
CGCGCTGGGGGTGGTTCGCGCTGCTCCTCTCCGACTGCCATTCCCTCTCTATAGGAGAAAAA
GATCATGGAGTCAGTCAGAAGAACGACAGCTAACCGCCCCCTCTGAGTCGCCACCCGCCCTCCACC
GATGCCGCCAACCGCCTACCACTTCCCCCTCGAGGCACCCCGCTTGAGGAGGAGGAAGTGA
AGCAGGACCCAGGTTGTAAGCGAAGACGACGAGGACCGCTCAGTACCAACAGAGGATAAAAGCA
CCAGGACAACCGCAGAGGAAACGAGGAACAAGTGGGGGGAGCGAAAGGCATGGGACTACCTAGAT
GTGGGAGACGACGTGCTTGAAGCATCTGCAGGCCAGTGCCTTATCTGAGTCGCCACCCGCC
GCAGCGATGTGCCCATAGCGGATGTCAGCCTGCTACGAACGCCACCTATTCTACCGCG
ACCCGCCAACGCCAACGGCACATGCGAGGCCAACCGCGCTCAACTTCTACCCGTATTGCC
GTGCCAGAGGTGCTGCCACCTATCACATCTTTCCAAAAGTCAAGATAACCCCTATCTGCC
ACCGCAGCCGAGGGACAAGCAGCTGGCCTTGCAGGCCAGGGCGCTGTCAACTGATATGCC
CGAAGTGCCAAAATCTTGAGGGTCTTGGACGCGACGAGAAGCGCGGCCAACGCTCTGCA
AACAGCGAAAATGAAAGTCACTCTGGAGTGTGGTGGAACTCGAGGGTGACAACGCC
TAAAACGCACTGAGGTCACTTGCCTACCCGCACTTAACCTACCCCCCAAGGT
AGTCATGAGTGAGCTGATCGTGCCTGCCGTGCGCAGCCCCCTGGAGAGGGATGAA
TTGCAAGAACAAACA

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/*lacZ*.PL-DEST™ (SEQ ID NO: 88).

GAGGAGGGCCTACCCGCAGTGGCGACGAGCAGCTAGCGCGTGGCTTAAACGCCGAGCCTGCCGACT
TGGAGGAGCGACGAAACTAATGATGGCGCAGTGTCTGTTACCGTGGAGCTTGAGTCATGCAGCGTT
CTTGCTGACCGGAGATGCAGCGCAAGCTAGAGGAAACATTGCACTACACCTTGCACAGGGCTACGTA
CGCCAGGCCTGCAAGATCTCCAACGTGGAGCTCTGCAACCTGGTCTCTACCTTGAATTTCGACGAAA
ACCGCCTGGCAAACGTGCTCATTCCACGCTCAAGGGCAGGCGCCGCGACTACGTCGGCAGCTG
CGTTTACTTATTCATGCTACACCTGGCAGACGCCATGGCGTTGGCAGCAGTGTGGAGGAGTGC
AACCTCAAGGAGCTGCAGAAACTGCTAAAGCAAAACCTGAAGGACCTATGGACGGCTTCAACGAGCGCT
CCGTGGCCGCGCACCTGGCGACATCATTTCGGAAACGCGTGTAAACACCCTGCAACAGGGCTG
AGACTTCACCAGTCAAAGCATGTTGCAAGAACTTAGGAACCTTATCCTAGAGCGCTCAGGAATCTTGGCC
GCCACCTGCTGTGCACTTCTAGCGACTTGTGCCATTAAAGTACCGCGAATGCCCTCCGCCCTTGG
GCCACTGCTACCTTCTGCAGCTAGCCAACCTACCTGCCCTACCAACTCTGACATAATGGAAGACGTGAGCG
TGACGGTCTACTGGAGTGTCACTGTCGTGCAACCTATGCAACCCGACCGCTCCCTGGTTGCAATTG
CAGCTGTTAACGAAAGTCAAATTATCGGTACCTTGAGCTGCAGGGTCCCTGCGCTGACGAAAAGTCC
CGGCTCCGGGGTTGAAAACACTCCGGGCTGTGGACGTCGGCTTACCTTCGCAAAATTGTAACCTGAGGA
CTACACGCCACAGGAGATTAGGTTCTACGAAGACCAATCCGCCGCAAATGCGAGCTTACCGCTG
GTCATTACCCAGGCCACATTCTGGCAATTGCAAGGCCATCAACAAAGCCCAGAGAGTTCTG
GAAAGGGACGGGGGTTTACTTGGACCCCCAGTCGGCGAGGAGCTAACCCAAATCCCCCGCCGCG
GCCCTATCAGCAGCAGCCGGCCCTGCTTCCCAGGATGGCACCCAAAAGAAAGCTGAGCTGCC
GCCACCACGGACGAGGAGGAATACTGGGACAGTCAGGCAGAGGAGGTTTGGACGAGGAGGAGGAG
ATGATGGAAGACTGGGAGAGCCTAGACGAGGAAGCTTCGGAGGTGAAAGAGGTGTCAGACGAAACACCG
CACCTCGGTCGATTCCCCCTGCGCGCCCGAGAAATCGCAACCGGTTCCAGCATGGCTACAACCT
CGCTCCTCAGGGCCGGCCACTGCCCCTGCGGACCCAAACCGTAGATGGGACACCCTGGAACCA
GCCGTTAAGTCCAAGCAGCCGGCCGTTAGCCAAAGAGCAACACAGGCCAAGGCTACCGCTATGG
GCCGGCACAAGAACGCCATAGTGCCTTGCAAGACTGTGGGGCACATCTCTTCGCCGGCTT
TCTTCTTACCATACGGCGTGGCTTCCCCCTGAAACATCTGCAATTACTACCGTCATCTACAGCCC
TACTGCACCGGGCGCAGCGGAGCGCAACAGCAGCGGCCACACAGAACGGCAAGGCGACCGGATAGC
AAGACTGTGACAAGGCAAGAAATCCACAGCGGGCGCAGCAGCAGGAGGAGGAGGCGCTGCGTCTGGCG
CCAACGAACCGTATGACCCCGAGCTTAGAAACAGGATTTCCTACTCTGTATGCTATATTCAACA
GAGCAGGGCCAAGAACAGAGCTGAAAATAAAAACAGGTTCTGCGATCCCTCACCGCAGCTGCC
TATCACAAGCGAAGATCAGCTTGGCGACGCTGGAGACGCGGAGGCTCTTCAGTAAATACTGCG
CGCTGACTCTTAAGGACTAGTTCGCCCTTCTCAAATTAAAGCGGAAAACACTACGTCATCTCCAGCG
GCCACACCCGGCCAGCACCTGCGTCAGGCCATTATGAGCAAGGAAATCCACGCCATATGTGG
AGTTACAGGCCACAAATGGGACTTGCAGGCTGGAGCTGCCAAGACTACTCAACCCGAAATAACTACATGA
GCGCGGACCCCACATGATATCCCGGTCAACGGAATCCGCGCCACCGAAACCGAATTCTGTTG
GGCGCTTATTACCAACACCTCGTAATAACCTTAATCCCGTAGTTGCCCTGCGCTGGTGTAC
GAAAGTCCGCTCCACCACTGTGGTACTTCCCAGAGACGCCAGGCCAGGCGAAGTTCAGATGACTAAC
GGCGCAGCTTGGGGCGGCTTCTGTCACAGGGTGCCTGCCAGGGTATAACTCACCTGACAAT
CAGAGGGCAGGTATTCAAGCTAACGACGAGTCGGTGAGCTCTCGCTGGTCTCCGACGGGACA
TTTCAGATCGCGGCCGCCGTCCTCATTACGCCCTCGCAGGCAATCTAACTCTGAGACCTCG
CCTCTGAGCCGCGCTTGGAGGCATTGAAACTCTGCAATTGAGGAGTTGTGCCATCGCTACTT
TAACCCCTTCTGGGACCTCCGCCACTATCGGATCAATTATTCTAACTTTGACGCGGTAAGGAC
TCGGCGACGGCTACGACTGAATGTTAAGTGGAGAGGAGAGCAACTGCCCTGAAACACCTGGTCC
GTCGCCACAAAGTGTGTTGCCCGACTCCGGTGAGTTGCTACTTGAATTGCCGAGGATCATAT
CGAGGGCCGGCGACGGCGTCCGGCTACCGCCAGGGAGAGCTTGCCTGAGCTGATTGGAGTT
ACCCAGGCCCTGCTAGTTGAGCGGGACAGGGGACCCCTGTTCTCACTGTGATTGCAACTGCT
ACCTTGATTACATCAAGATTTGTTGCCATCTGTGCTGAGTATAAAATACAGAAATTAAAT
ACTGGGCTCTATGCCATCTGTAACGCCACCGTCTCACCGCCCAAGCAAAACCAAGGGCAAC
ACCTGGTACTTTAACATCTCCCTCTGATTACAACAGTTCAACCCAGACGGAGTGTAC
GAGAACCTCTCGAGCTCAGTACTCCATCAGAAAAACACCACCCCTTACCTGCCGGAAC
GTGCGTACCGGCCGCTGCACCACACCTACCGCTGACCGTAAACCGAGACTTTGCC
TAACCTGTTACAGAACAGGAGGTGAGCTAGAAAACCTTAGGGTATTAGGCCAAGGGCAG
TGTGGGTTTATGAACAATTCAAGCAACTCTACGGGCTATTCTAAATTCAAGGTTCT
AATTATTACAGAGCAGCGCCTGCTAGAAAAGACGCAAGGGCAGGGCGAG
CTCCAAGACATGGTTAACCTGCACCACTGCAAAAGGGTATCTTGTCTGGTAAAGCAGGCC
AAAGTC

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/lacZ.PL-DEST™
(SEQ ID NO: 88).

CCTACGACAGTAATACCACCGGACACCGCCTAGCTACAAGTTCCAACCAAGCGTCAGAAATTGGTGGT
CATGGTGGGAGAAAAGCCCATTACCATAACTCAGCACTCGTAGAAACCGAAGGCTGCATTCACTCACCT
TGTCAGGACCTGAGGATCTCTGCACCCTTATTAAGACCCCTGTGCGGTCTCAAAGATCTTATTCCCTTA
ACTAATAAAAAAAATAATAAAGCATCACTTACTTAAATCAGTTAGCAAATTCTGTCCAGTTATTCA
GCAGCACCTCCCTGCCCTCCAGCTCTGGTATTGAGCTTCCCTGCTGCAAACCTTCTCCACAA
TCTAAATGGAATGTCAGTTCCCTGTTCCATCCGACCCACTATCTCATGTTGTTGCAGATG
AAGCGCGAAGACCGTCTGAAGATACTCAACCCGTATCCATATGACACGGAAACCGGTCTCCAA
CTGTGCCTTTCTTACTCCTCCCTTGATCCCCAATGGGTTCAAGAGAGTCCCCCTGGGGTACTCTC
TTTGCCTATCCGAACCTCTAGTTACCTCAATGGCATGCTTGCCTCAAATGGGAAACGGCCTCT
CTGGACGAGGCCGGAACCTTACCTCCAAAATGTAACCACTGTGAGGCCACCTCTCAAAAAACCAAGT
CAAACATAAACCTGAAATATCTGCACCCCTCACAGTTACCTCAGAACGCCAACTGTGGCTGCCCGC
ACCTCTAATGGTCGCGGGCAACACACTCACCAGTCAATCACAGGCCCTGCTAACCGTGCACGACTCCAA
CTTAGCATTGCCACCCAGGACCCCTCACAGTGTAGAAGGAAGCTAGCCCTGCAAACATCAGGCC
TCACCACCAACCGATAGCAGTACCCCTACTATCACTGCCTACCCCTCTAACTACTGCCACTGGTAGCT
GGCATTGACTTGAAGAGCCCATTATACACAAAATGGAAAATAGGACTAAAGTACGGGCTCCTTG
CATGTAACAGACGACCTAACACACTTGAACCGTAGCAACTGGTCAGGTGTGACTATTAATAACTCCT
TGCAAACAAAGTTACTGGAGCCTGGGTTTGATTACAAGGAAATATGCAACTTAATGTAGCAGGAGG
ACTAAGGATTGATTCTCAAAACAGACGCCATTACTTGATGTTAGTTATCCGTTGATGCTCAAAACCAA
CTAAATCTAAGACTAGGACAGGCCCTTTTATAAAACTCAGGCCACAACCTGGATATTAACTACAACA
AAGGCCCTTACTTGTGTTACAGCTTAAACAAATTCCAAAAGCTGAGGTTAACCTAACGACTGCCAAGGG
GTTGATGTTGACGCTACAGCCATAGCCATTATGCAGGAGATGGCTGAATTGGTACCTAATGCA
CCAAACACAAATCCCTCAAACAAAATTGCCATGGCTAGAATTGATTCAAACAAAGGCTATGGTC
CTAAACTAGGAACGGCCTAGTTTGACAGCACAGGTGCCATTACAGTAGGAAACAAAATAATGATAA
GCTAACTTGTGGACCACACCAGCTCCATCCTAACTGTAGACTAAATGCAGAGAAAGATGCTAAACTC
ACTTTGGCTTAACAAAATGTGGCAGTCAAATACTGCTACAGTTCACTTTGGCTGTTAAGGCAGTT
TGGCTCAATATCTGAAACAGTCAAAGTGTCTCATCTTATTATAAGATTGACGAAATGGAGTGTCACT
AAACAATTCCCTGGACCCAGAATATTGAACTTTAGAAATGGAGATCTTACTGAAGGCACAGCCTAT
ACAAACGCTGGGATTATGCCAACCTATCAGCTTACCCAAACTCAGGTAAACCTAACCAACTAAACGG
ACATTGTCAGTCAAGTTACTAAACGGAGACAAAACCTGTAACACTAACCAACTAAACGG
TACACAGGAAACAGGAGACACAACCTCAAGTGCATACTCTATGTCACTTGCATGGACTGGCTGGCAC
AACTACATTAATGAAATATTGCCACATCCTTACACTTTTACATCATTGCCAAGAATAAGAATCG
TTTGTGTTATGTTCAACGTGTTATTTCAATTGAGAAAATTGCAATCATTTCATTCACTAGTAGTA
TAGCCCCACCCACACAGCTTACAGATCACCGTACCTTAATCAAACCTCACAGAACCCCTAGTATTCAA
CCTGCCACCTCCCTCCAACACACAGAGTACACAGTCTTCTCCCGGCTGGCTTAAAAGCATCATA
TCATGGGTAACAGACATATTCTAGGTGTTATTCACACGGTTCTGAGCCAAACGCTCATCAG
TGATATTAATAAAACTCCCGGGCAGCTACCTAAGTTCACTGCTGCTGCTGAGGCTACAGGCTG
CTGTCCAACCTGCGGTGCTTAACGGGGGAAGGAGAACTCCACGCTACATGGGGTAGAGTCATAA
TCGTGCATCAGGATAGGGCGGTGGTGCAGCAGCGCGAATAAACTGCTGCCCGCGCTCCGTCC
TGCAGGAATACAACATGCCAGTGGCTCCTCAGCGATGATTGCCACCGCCCGCAGCATAAGGCCCTTG
CCTCCGGGACAGCAGGCCACCTGATCTCACTTAAACATGAGCACAGTAACCTGAGCACAGCACCAATA
TTGTCAAAATCCCACAGTCAAGGCGCTGTATCCAAAGCTCATGGGGGGACCACAGAACCCACGTGGC
CATCATACCAAGCGCAGGTAGATTAAAGTGGCAGCCCTCATAAACACGCTGGACATAAACATTACCTC
TTTGGCATGGTAATTCAACCTCCGGTACCATATAAAACCTCTGATTAACATGGGCCATCCACC
ACCATCCTAAACCAGCTGGCAAAACCTGCCCGCCGCTATACACTGAGGGAAACGGGACTGGAAACAAT
GACAGTGGAGAGGCCAGGACTCGTAACCATGGATCATGCTCGTACATGATATCAATGTTGGCACAACA
CAGGCACACGTGCATACACTCCCTCAGGATTACAAGCTCCTCCCGCTTGAACCCATATCCCAGGGAAACA
ACCCATTCTGAATCAGCGTAAATCCCACACTGCAGGGAAAGACCTCGCACGTAACCTACGTTGCAATTG
TCAAAGTGTACATTGGGACAGCAGCGGATGATCCTCCAGTATGGTAGCGGGTTCTGTCTCAAAGG
AGGTAGACGATCCCTACTGTACGGAGTGCAGCGAGACAACCGAGATCGTGTGGCTGAGTCATGCCA
AATGGAACGCCGGACGTAGTCATATTCTGAAGCAAACCCAGGGTGCAGGGCTGACAAACAGATCGCT
CTCCGGTCTGCCGCTAGATCGCTCTGTGAGTTGAGTATATCCACTCTCAAAGCATCCAGGC
GCCCGCTGGCTTGGGTTCTATGTAACCTCCTCATGCGCCGCTGCCCTGATAACATCCACCCACCGCAGA
ATAAGCCACACCCAGCCAACCTACACATTGTTCTGCGAGTCACACACGGGAGGGAGGGAAAGAGCTGGA
AGAACCATGTTTTTTATTCAAAGATTCAAAACCTCAAATGAAGATCTATTAAAGTGAACG

Table 11 (continued) Nucleotide sequence of pAd/CMV/V5-GW/lacZ.PL-DEST™
(SEQ ID NO: 88).

CGCTCCCCTCCGGTGGCGTGGTCAAACCTACAGCAAAGAACAGATAATGGCATTGTAAGATGTTGCA
CAATGGCTTCCAAAAGGAAACGGCCCTCACGTCCAAGTGGACGTAAGGCTAAACCCTCAGGGTGAAT
CTCCTCTATAAACATTCCAGCACCTCAACCATGCCAATAATTCTCATCGCCACCTTCTCAATATA
TCTCTAAGCAAATCCCGAATATTAAGTCGGCATTGAAAAATCTGCTCAGAGCGCCCTCCACCTTCA
GCCTCAAGCAGCGAATCATGATTGAAAAATTCAAGGTCCTCACAGACCTGTATAAGATTCAAAGCGGA
ACATTAACAAAATACCGCGATCCCGTAGGTCCTCGCAGGGCAGCTGAACATAATCGTCAGGTCTG
CACGGACCAGCGCGGCCACTTCCCCGCCAGGAACCTTGACAAAAGAACCCACACTGATTATGACACGCAT
ACTCGGAGCTATGCTAACCGCGTAGCCCCGATGTAAGCTTGTGATGGCGGCGATAAAAATGCAA
GGTGTGCTCAAAAATCAGGCAAAGCCTCGCGAAAAAGAAAGCACATCGTAGTCATGCTCATGAGA
TAAAGGCAGGTAGCTCCGGAACCACACAGAAAAGACACCATTTCCTCAAACATGTCTGCGGGTT
TCTGCATAAACACAAAATAACAAAAACATTAAACATTAGAACGCTGTCTACAACAGGAAA
ACAACCCCTATAAGCATAAGACGGACTACGGCATGCCGGGTGACCGTAAAAAAACTGGTCACCGTGAT
TAAAAGCACCACCGACAGCTCCCGGTATGTCGGAGTCATAATGTAAGACTCGGAAACACATCAGG
TTGATTACATCGGTAGTCTAAAAGCGACCGAAATAGCCCCGGGAATACATACCGCAGGGTGTAGA
GACAACATTACAGCCCCATAGGAGGTATAACAAAATTAAAGGAGAGAAAACACATAAACACCTGAA
AACCCCTCCTGCCTAGGCAAATAGCACCCCTCCGCTCAGAACACATACAGCGCTTCCACAGCGGCAGC
CATAACAGTCAGCCTTACCAAGTAAAAAGAAAACCTATTAAAAAAACACCACCGACACGGCACCAGCTC
AATCAGTCACAGTGTAAAAAGGGCAAGTGCAGAGCGAGTATATAGGACTAAAAATGACGTAACGG
TTAAAGTCCACAAAAAACACCCAGAAAACCGCACCGAACCTACGCCAGAAACGAAAGCCAAAAACCC
ACAACCTCCTCAAATGTCACTTCCGTTTCCCACGTTACGTACTTCCATTAAAGAAAACCTACAATT
CCCAACACATACAAGTTACTCCGCCCTAAACCTACGTACCCGCCCCGTCCCACGCCCGGCCACGT
CACAAACTCCACCCCTCATTATCATATTGGCTCAATCCAAAATAAGGTATATTATTGATGATGTTAAT
TAATTAAATCCGATGCGATATCGAGCTCTCCCGGAATTGGATCTGCGACGGCTGGATGGCCT
TCCCCATTATGATTCTCTCGCTCCGGGGCATGGGATGCCCGTGTGAGGCCATGCTGTCAGGCA
GGTAGATGACGACCATCAGGACAGCTTACGGCCAGCAAAGGCCAGGAACCGTAAAAGGCCCGTTG
CTGGCGTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGC
GAAACCCGACAGGACTATAAGATAACCGCGTTCCCGGAATTGGATCTGCGCTCTCTGTTCC
GACCCCTGCCGTTACCGGATACCTGTCGCCCTTCTCCCTCGGAAGCGTGGCGTTCTCAATGCTCA
CGCTGTAGGTATCTCAGTTCGGTAGGTGCTCGCTCCAGCTGGCTGTGTCACGAACCCCCCGTTC
AGCCCGACCGCTGCGCCTTATCCGTAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTATGCC
ACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGAGCTGGCTACAGAGTTCTGAG
TGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTGGTATCTGCGCTCTGCTGAGCCAGTTACCT
TCGGAAAAAGAGTTGGTAGCTTGTGATCCGGAAACAAACCCAGCTGGTAGCGGTGGTTTTGTTG
CAAGCAGCAGATTACCGCGAGAAAAAAAGGATCTCAAGAAGATCTTGTGATCTTCTACGGGTCTGAC
GCTCAGTGGAACGAAAACTCACGTTAAGGGATTGGTATGAGATTATCAAAAGGATCTTCACCTAGA
TCCTTTAAATCAATCTAAAGTATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCACTGAG
GCACCTATCTCAGCGATCTGCTATTGTTCATCCATAGTGGCTGACTCCCCGTCGTGAGATAACTA
CGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCAGAACCCACGCTCACCGCCTCC
AGATTATCAGCAATAAACCCAGCCAGCGGAAGGGCCGAGCGCAGAACGTTCTGCAACTTATCCGCC
TCCATCCAGTCTATTAAATTGTCGCCGGAAAGCTAGAGTAAGTAGTTGCTGACAGTTACCAATGCTTAATCA
TTGTTGCCATTGNTGCAAGGCATCGTGGTGTACGCTCGTGTGGTATGGCTTCACTCAGCTCCGGTTC
CCAACGATCAAGGCAGGTTACATGATCCCCATGGTGTGAAAAAGCGGTTAGCTCTCGTCTCCG
ATCGTTGTAGAAGTAAGTGGCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTA
CTGTCATGCCATCGTAAGATGCTTCTGTAAGTGGTGTGACTGGTACTCAACCAAGTCATTGAGAATAGTG
TATGCGGCGACCGAGTTGCTCTGCCCGCGTCAACACGGGATAATACCGGCCACATAGCAGAACTTTA
AAAGTGTCTCATCATTGAAAACGTTCTCGGGCGAAAACCTCAAGGATCTTACCGCTGTTGAGATCCA
GTTCGATGTAACCCACTCGTCACCAACTGATCTCAGCATCTTACTTCACCGCGTTCTGGGTG
AGCAAAAACAGGAAGGCAAAATGCCGAAAAAGGGATAAGGGCAGACCGGAAATGTTGAATACTCATA
CTCTCCTTTCAATATTATGAGCATTATCAGGGTTATTGCTCATGAGCGGATACATATTGAAAT
GTATTAGAAAATAACAAATAGGGTTCCGCGCACATTCCCGAAAAGTGCCACGTACGTCAGAAG
AACCAATTATTCATGACATTAACCTATAAAATAGGCAGTACGAGGCCCTTCGCTTCAAGGATCC
GAATTCCGGAGAGCTGATCGCATGCGATTAAATTAAATTAA

Please amend Table 12 on pages 395-403 as follows:

Table 12: Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

OpIE-2 pr

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1 CATGATGATA AACAAATGTAT GGTGCTAATG TTGCTTCAAC AACAAATTCTG  
GTACTACTAT TTGTTACATA CCACGATTAC AACGAAGTTG TTGTTAACAC  
OpIE-2 pr  
~~~~~  
51 TTGAACGTGT TTTTCATGTT TGCCAACAAG CACCTTTATA CTCGGTGGCC
AACTTGACAC AAAAGTACAA ACGGTTGTT GTGGAAATAT GAGCCACCGG
OpIE-2 pr
~~~~~  
101 TCCCCACCCAC CAACTTTTT GCACTGCAAA AAAACACGCT TTTGCACGCG  
AGGGGTGGTG GTTGAAAAAA CGTGACGTTT TTTTGTGCGA AAACGTGCGC  
OpIE-2 pr  
~~~~~  
151 GGCCCATACAC TAGTACAAAC TCTACGTTTC GTAGACTATT TTACATAAAT
CCGGGTATGT ATCATGTTG AGATGCAAAG CATCTGATAA AATGTATTAA
OpIE-2 pr
~~~~~  
201 AGTCTACACC GTTGTATACG CTCCAAATAC ACTACCACAC ATTGAACCTT  
TCAGATGTGG CAACATATGC GAGGTTTATG TGATGGTGTG TAACTTGGAA  
OpIE-2 pr  
~~~~~  
251 TTTGCAGTGC AAAAAAGTAC GTGTCGGCAG TCACGTAGGC CGGCCTTATC
AAACGTCAACG TTTTTCATG CACAGCCGTC AGTGCATCCG GCCGGAATAG
OpIE-2 pr
~~~~~  
301 GGGTCGCGTC CTGTCACGTA CGAATCACAT TATCGGACCG GACGAGTGT  
CCCAGCGCAG GACAGTGCAT GCTTAGTGTG ATAGCCTGGC CTGCTCACAA  
OpIE-2 pr  
~~~~~  
351 GTCTTATCGT GACAGGACGC CAGCTTCCTG TGTTGCTAAC CGCAGCCGGA
CAGAATAGCA CTGTCCTGCG GTCGAAGGAC ACAACGATTG GCGTCGGCCT
OpIE-2 pr
~~~~~  
401 CGCAACTCCT TATCGGAACA GGACGCGCCT CCATATCAGC CGCGCGTTAT  
GCGTTGAGGA ATAGCCTTGT CCTGCGCGGA GGTATAGTCG GCGCGCAATA  
OpIE-2 pr  
~~~~~  
451 CTCATGCACG TGACCGGACA CGAGGGCGCC GTCCCGCTTA TCGCGCCTAT
GAGTACGTGC ACTGGCCTGT GCTCCGCGGG CAGGGCGAAT AGCGCGGATA
OpIE2FOR
~~~~~  
OpIE-2 pr  
~~~~~

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

501 AAATACAGCC CGCAACGATC TGGTAAACAC AGTTAACAG CATCTGTTCG
TTTATGTCGG GCGTTGCTAG ACCATTGTG TCAACTTGTG GTAGACAAGC
551 AATTAAAGC TTGATATCGA ATTCTGCAG CCCAGCGTG GATCCTCGAT
TTAAATTCG AACTATAGCT TAAGGACGTC GGGTCGCGAC CTAGGAGCTA
attr1
~~~~~  
601 CACAAGTTG TACAAAAAAG CTGAACGAGA AACGTAAAAT GATATAAATA  
GTGTTCAAAC ATGTTTTTC GACTTGCTCT TTGCATTTA CTATATTAT  
attr1  
~~~~~  
651 TCAATATATT AAATTAGATT TTGCATAAAA AACAGACTAC ATAATACTGT
AGTTATATAA TTTAATCTAA AACGTATTT TTGTCTGATG TATTATGACA
attr1
~~~~~  
701 AAAACACAAC ATATCCAGTC ACTATGGCGG CCGCATTAGG CACCCCAGGC  
TTTGTTGTTG TATAGGTCAG TGATACCGCC GGC GTAATCC GTGGGGTCCG  
751 TTTACACTTT ATGCTTCCGG CTCGTATAAT GTGTGGATT TGAGTTAGGA  
AAATGTGAAA TACGAAGGCC GAGCATATTA CACACCTAAA ACTCAATCCT  
Cmr  
~~~~~  
801 TCCGTCGAGA TTTTCAGGAG CTAAGGAAGC TAAAATGGAG AAAAAAAATCA
AGGCAGCTCT AAAAGTCCTC GATTCTTCG ATTTTACCTC TTTTTTAGT
Cmr
~~~~~  
851 CTGGATATAC CACCGTTGAT ATATCCAAT GGCACTCGTAA AGAACATTT  
GACCTATATG GTGGCAACTA TATAGGGTTA CCGTAGCATT TCTTGTAAAA  
Cmr  
~~~~~  
901 GAGGCATTTC AGTCAGTTGC TCAATGTACC TATAACCAGA CCGTTCAGCT
CTCCGTAAAG TCAGTCAACG AGTTACATGG ATATTGGTCT GGCAAGTCGA
Cmr
~~~~~  
951 GGATATTACG GCCTTTTAA AGACCGTAAAG GAAAATAAG CACAAGTTT  
CCTATAATGC CGGAAAAATT TCTGGCATT TTTTTATTG GTGTTCAAAA  
Cmr  
~~~~~  
1001 ATCCGGCCTT TATTCACATT CTTGCCGCC TGATGAATGC TCATCCGGAA
TAGGCCGGAA ATAAGTGTAA GAACGGCGG ACTACTTACG AGTAGGCCTT
Cmr
~~~~~  
1051 TTCCGTATGG CAATGAAAGA CGGTGAGCTG GTGATATGGG ATAGTGTCA  
AAGGCATACC GTTACTTTCT GCCACTCGAC CACTATACCC TATCACAAGT  
Cmr  
~~~~~

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

1101 CCCTTGTAC ACCGTTTCC ATGAGCAAAC TGAAACGTT TCATCGCTCT
GGGAACAATG TGGCAAAAGG TACTCGTTG ACTTTGAAA AGTAGCGAGA
Cmr
~~~~~  
1151 GGAGTGAATA CCACGACGAT TTCCGGCAGT TTCTACACAT ATATTCGCAA  
CCTCACTTAT GGTGCTGCTA AAGGCCGTCA AAGATGTGTA TATAAGCGTT  
Cmr  
~~~~~  
1201 GATGTGGCGT GTTACGGTGA AAACCTGGCC TATTTCCCTA AAGGGTTTAT
CTACACCGCA CAATGCCACT TTTGGACCAG ATAAAGGGAT TTCCCAAATA
Cmr
~~~~~  
1251 TGAGAATATG TTTTCGTCT CAGCCAATCC CTGGGTGAGT TTCACCAAGTT  
ACTCTTATAC AAAAAGCAGA GTCGGTTAGG GACCCACTCA AAGTGGTCAA  
Cmr  
~~~~~  
1301 TTGATTTAAA CGTGGCCAAT ATGGACAACT TCTTCGCCCG CGTTTCACC
AACTAAATT GCACCGGTTA TACCTGTTGA AGAACGGGG GCAAAAGTGG
Cmr
~~~~~  
1351 ATGGGCAAAT ATTATACGCA AGGCGACAAG GTGCTGATGC CGCTGGCGAT  
TACCCGTTA TAATATGCGT TCCGCTGTT CACGACTACG GCGACCGCTA  
Cmr  
~~~~~  
1401 TCAGGTTCAT CATGCCGTT GTGATGGCTT CCATGTCGGC AGAATGCTTA
AGTCCAAGTA GTACGGAAA CACTACCGAA GGTACAGCCG TCTTACGAAT
Cmr
~~~~~  
1451 ATGAATTACA ACAGTACTGC GATGAGTGGC AGGGCGGGGC GTAAACGCGT  
TACTTAATGT TGTCAATGACG CTACTCACCG TCCCGCCCCG CATTGCGCA  
1501 GGATCCGGCT TACTAAAAGC CAGATAACAG TATGCGTATT TGCGCGCTGA  
CCTAGGCCGA ATGATTTCG GTCTATTGTC ATACGCATAA ACGCGCGACT  
1551 TTTTGCGGT ATAAGAATAT ATACTGATAT GTATAACCGA AGTATGTCAA  
AAAAACGCCA TATTCTTATA TATGACTATA CATATGGCT TCATACAGTT  
1601 AAAGAGGTAT GCTATGAAGC AGCGTATTAC AGTGACAGTT GACAGCGACA  
TTTCTCCATA CGATACTTCG TCGCATAATG TCACTGTCAA CTGTCGCTGT  
1651 GCTATCAGTT GCTCAAGGCA TATATGATGT CAATATCTCC GGTCTGGTAA  
CGATAGTCAA CGAGTTCCGT ATATACTACA GTTATAGAGG CCAGACCATT  
1701 GCACAACCAT GCAGAAATGAA GCCCGTCGTC TCGGTGCCGA ACGCTGGAAA  
CGTGTGGTA CGTCTTACTT CGGGCAGCAG ACGCACGGCT TGCGACCTTT  
1751 CGGGAAAATC AGGAAGGGAT GGCTGAGGTC GCCCGGTTA TTGAAATGAA  
CGCCTTTAG TCCTTCCCTA CCGACTCCAG CGGGCCAAAT AACTTACTT  
ccdB  
~~~~~

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

1801 CGGCTTTT GCTGACGAGA ACAGGGGCTG GTGAAATGCA GTTTAAGGTT
GCCGAGAAAA CGACTGCTCT TGTCCCCGAC CACTTACGT CAAATTCCAA
ccdB
~~~~~  
1851 TACACCTATA AAAGAGAGAG CCGTTATCGT CTGTTGTGG ATGTACAGAG  
ATGTGGATAT TTTCTCTCTC GGCAATAGCA GACAAACACC TACATGTCTC  
ccdB  
~~~~~  
1901 TGATATTATT GACACGCCCG GGCGACGGAT GGTGATCCCC CTGGCCAGTG
ACTATAATAA CTGTGCGGGC CCGCTGCCA CCACTAGGGG GACCGGTAC
ccdB
~~~~~  
1951 CACGTCTGCT GTCAGATAAA GTCTCCCGTG AACTTTACCC GGTGGTGCAT  
GTGCAGACGA CAGTCTATT CAGAGGGCAC TTGAAATGGG CCACCACGTA  
ccdB  
~~~~~  
2001 ATCGGGGATG AAAGCTGGCG CATGATGACC ACCGATATGG CCAGTGTGCC
TAGCCCCTAC TTTCGACCGC GTACTACTGG TGGCTATAACC GGTACACGG
ccdB
~~~~~  
2051 GGTCTCCGTT ATCGGGGAAG AAGTGGCTGA TCTCAGCCAC CGCGAAAATG  
CCAGAGGCAA TAGCCCCTTC TTCACCGACT AGAGTCGGTG GCGCTTTAC  
ccdB  
~~~~~  
2101 ACATCAAAAA CGCCATTAAC CTGATGTTCT GGGGAATATA AATGTCAGGC
TGTAGTTTT GCGGTAATTG GACTACAAGA CCCCTTATAT TTACAGTCGG
attR2
~~~~~  
2151 TCCCTTATAC ACAGCCAGTC TGCAGGTCGA CCATAGTGAC TGGATATGTT  
AGGGAAATATG TGTGGTCAG ACGTCCAGCT GGTATCACTG ACCTATACAA  
attR2  
~~~~~  
2201 GTGTTTACA GTATTATGTA GTCTGTTTT TATGCAAAT CTAATTAAAT
CACAAAATGT CATAATACAT CAGACAAAAA ATACGTTTA GATTAAATTA
attR2
~~~~~  
2251 ATATTGATAT TTATATCATT TTACGTTCT CGTTCAGCTT TCTTGTACAA  
TATAACTATA AATATAGTAA AATGCAAAGA GCAAGTCGAA AGAACATGTT  
attR2  
V5 tag  
~~~~~  
2301 AGTGGTGATC GACCCGGGTC TAGAGGGCCC GCGGTTCGAA GGTAAAGCCTA
TCACCACTAG CTGGGCCAG ATCTCCGGG CGCCAAGCTT CCATTCGGAT
V5 tag
~~~~~

Poly His 6  
tag

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

2351 TCCCTAACCC TCTCCTCGGT CTCGATTCTA CGCGTACCGG TCATCATCAC  
AGGGATTGGG AGAGGAGCCA GAGCTAAGAT GCGCATGCC AGTAGTAGTG  
Poly His 6 tag OpIE-2 PolyA

2401 CATCACCATT GAGTTTATCT GACTAAATCT TAGTTGTAT TGTCATGTTT  
GTAGTGGTAA CTCAAATAGA CTGATTTAGA ATCAAACATA ACAGTACAAA  
OpIE-2 PolyA

2451 TAATACAATA TGTTATGTTT AAATATGTTT TTAATAAATT TTATAAAATA  
ATTATGTTAT ACAATACAAA TTTATACAAA AATTATTTAA AATATTTAT  
OpIE-2 PolyA

2501 ATTTCAACTT TTATTGTAAC AACATTGTCC ATTTACACAC TCCTTCAG  
TAAAGTTGAA ATAACATTG TTGTAACAGG TAAATGTGTG AGGAAAGTTC

2551 CGCGTGGGAT CGATGCTCAC TCAAAGGCAG TAATACGGTT ATCCACAGAA  
GCGCACCCCTA GCTACGAGTG AGTTTCCGCC ATTATGCCAA TAGGTGTCTT  
pMB1 ori

2601 TCAGGGGATA ACGCAGGAAA GAACATGTGA GCAAAAGGCC AGCAAAAGGC  
AGTCCCCTAT TGCCTCCTTT CTTGTACACT CGTTTCCGG TCGTTTCCG  
pMB1 ori

2651 CAGGAACCGT AAAAAGGCCG CGTTGCTGGC GTTTTCCAT AGGCTCCGCC  
GTCCTTGCA TTTTCCGGC GCAACGACCG CAAAAGGTA TCCGAGGCAG  
pMB1 ori

2701 CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG GTGGCGAAC  
GGGGACTGCT CGTAGTGTGTT TTAGCTGCGA GTTCAGTCTC CACCGCTTTG  
pMB1 ori

2751 CCGACAGGAC TATAAAGATA CCAGGCCTTT CCCCCTGGAA GCTCCCTCGT  
GGCTGTCCTG ATATTCCTAT GGTCCGCAA GGGGGACCTT CGAGGGAGCA  
pMB1 ori

2801 GCGCTCTCCT GTTCCGACCC TGCCGCTTAC CGGATACCTG TCCGCCCTTC  
CGCGAGAGGA CAAGGCTGGG ACGGCGAATG GCCTATGGAC AGGCGGAAAG  
pMB1 ori

2851 TCCCTTCGGG AAGCGTGGCG CTTTCTCATA GCTCACGCTG TAGGTATCTC  
AGGGAAGCCC TTCGCACCGC GAAAGAGTAT CGAGTGCAC ATCCATAGAG  
pMB1 ori

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

2901 AGTTCGGTGT AGGTCGTTCG CTCCAAGCTG GGCTGTGTGC ACGAACCCCC  
TCAAGCCACA TCCAGCAAGC GAGGTTCGAC CCGACACACG TGCTTGGGGG  
pMB1 ori  
~~~~~  
2951 CGTTCAGCCC GACCGCTGCG CCTTATCCGG TAACTATCGT CTTGAGTCCA
GCAAGTCGGG CTGGCGACGC GGAATAGGCC ATTGATAGCA GAACTCAGGT
pMB1 ori
~~~~~  
3001 ACCCGGTAAG ACACGACTTA TCGCCACTGG CAGCAGCCAC TGGTAACAGG  
TGGGCCATTG TGTGCTGAAT AGCGGTGACC GTCGTCGGTG ACCATTGTCC  
pMB1 ori  
~~~~~  
3051 ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
TAATCGTCTC GCTCCATACA TCCGCCACGA TGTCTCAAGA ACTTCACCAC
pMB1 ori
~~~~~  
3101 GCCTAACTAC GGCTACACTA GAAGAACAGT ATTTGGTATC TGCGCTCTGC  
CGGATTGATG CCGATGTGAT CTTCTGTCA TAAACCATAG ACGCGAGACG  
pMB1 ori  
~~~~~  
3151 TGAAGCCAGT TACCTTCGGA AAAAGAGTTG GTAGCTCTTG ATCCGGCAA
ACTTCGGTCA ATGGAAGCCT TTTTCTCAAC CATCGAGAAC TAGGCCGTTT
pMB1 ori
~~~~~  
3201 CAAACCACCG CTGGTAGCGG TGGTTTTTT GTTGCAAGC AGCAGATTAC  
GTTTGGTGGC GACCATCGCC ACCAAAAAAA CAAACGTTCG TCGTCTAATG  
pMB1 ori  
~~~~~  
3251 GCGCAGAAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT TCTACGGGGT
CGCGTCTTT TTTCCTAGAG TTCTTCTAGG AAACTAGAAA AGATGCCCA
3301 CTGACGCTCA GTGGAACGAA AACTCACGTT AAGGGATTTC GGTCATGCC
GACTGCGAGT CACCTTGCTT TTGAGTGCAA TTCCCTAAAA CCAGTACGGG
GP64 promoter
~~~~~  
3351 TTGTTCCGAA GGGTTGTGTC ACGTAGGCCA GATAACGGTC GGGTATATAA  
AACAAAGGCTT CCCAACACAG TGCATCCGGT CTATTGCCAG CCCATATATT  
GP64 promoter  
~~~~~  
3401 GATGCCTCAA TGCTACTAGT AAATCAGTCA CACCAAGGCT TCAATAAGGA
CTACGGAGTT ACGATGATCA TTTAGTCAGT GTGGTTCCGA AGTTATTCCCT
GP64 promoter EM7
~~~~~  
3451 ACACACAAGC AAGCCCTTTG AGTCAAGGGC TGCCGGGCTG CAGCACGTGT  
TGTGTGTTCG TTCGGGAAAC TCAGTTCCCG ACGGCCGAC GTCGTGCACA  
EM7  
~~~~~

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

3501 TGACAATTAA TCATCGGCAT AGTATATCGG CATAGTATAA TACGACAAGG
ACTGTTAATT AGTAGCCGTA TCATATAGCC GTATCATATT ATGCTGTTCC
Blasticidin(r)
~~~~~  
3551 TGAGGAACTA AACCATGGCC AAGCCTTGT CTCAGAAGA ATCCACCCTC  
ACTCCTTGAT TTGGTACCGG TTCGGAAACA GAGTTCTTCT TAGGTGGGAG  
Blasticidin(r)  
~~~~~  
3601 ATTGAAAGAG CAACGGCTAC AATCAACAGC ATCCCCATCT CTGAAGACTA
TAACTTCTC GTGCCGATG TTAGTTGTCG TAGGGGTAGA GACTTCTGAT
Blasticidin(r)
~~~~~  
3651 CAGCGTCGCC GGCAGCAGCTC TCTCTAGCGA CGGCCGCATC TTCACTGGTG  
GTCGCAGCGG CCGCGTCGAG AGAGATCGCT GCCGGCGTAG AAGTGACCAC  
Blasticidin(r)  
~~~~~  
3701 TCAATGTATA TCATTTACT GGGGGACCTT GCGCAGAACT CGTGGTGCTG
AGTTACATAT AGTAAAATGA CCCCTGGAA CGCGTCTTGA GCACCACGAC
Blasticidin(r)
~~~~~  
3751 GGCACTGCTG CTGCTGCCGC AGCTGGCAAC CTGACTTGTA TCGTCGCGAT  
CCGTGACGAC GACGACGCCG TCGACCGTTG GACTGAACAT AGCAGCGCTA  
Blasticidin(r)  
~~~~~  
3801 CGGAAATGAG AACAGGGGCA TCTTGAGCCC CTGCGGACGG TGCCGACAGG
GCCTTACTC TTGTCCCCGT AGAACTCGGG GACGCCTGCC ACGGCTGTCC
Blasticidin(r)
~~~~~  
3851 TTCTTCTCGA TCTGCATCCT GGGATCAAAG CCATAGTGAA GGACAGTGAT  
AAGAAGAGCT AGACGTAGGA CCCTAGTTTC GGTATCACTT CCTGTCACTA  
Blasticidin(r)  
~~~~~  
3901 GGACAGCCGA CGGCAGTTGG GATTCTGAA TTGCTGCCCT CTGGTTATGT
CCTGTCGGCT CCCGTCAACC CTAAGCACTT AACGACGGGA GACCAATACA
Blasticidin(r)
~~~~~  
3951 GTGGGAGGGC TAAGCACTTC GTGGCCGAGG AGCAGGACTG ACACGTCCCG  
CACCCCTCCCG ATTCTGTGAAG CACCGGCTCC TCGTCCTGAC TGTGCAGGGC  
4001 GGAGATCTGC ATGTCTACTA AACTCACAAA TTAGAGCTTC AATTAAATTAA  
CCTCTAGACG TACAGATGAT TTGAGTGTAA AATCTCGAAG TTAAATTAA  
Amp (r)  
~~~~~  
4051 TATCAGTTAT TACCCATTGA AAAAGGAAGA GTATGAGTAT TCAACATTTC
ATAGTCAATA ATGGGTAACT TTTTCCTTCT CATACTCATA AGTTGTAAAG
Amp (r)
~~~~~

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

4101 CGTGTGCCCTT ATTCCCTT TTTGGGCA TTTGCCTTC CTGTTTTGC  
GCACAGCGGG AATAAGGGAA AAAACGCCGT AAAACGGAAG GACAAAAACG  
Amp (r)  
~~~~~  
4151 TCACCCAGAA ACGCTGGTGA AAGTAAAAGA TGCTGAAGAT CAGTTGGGTG
AGTGGGTCTT TGCGACCACT TTCATTTCT ACCACTTCTA GTCAACCCAC
Amp (r)
~~~~~  
4201 CACGAGTGGG TTACATCGAA CTGGATCTCA ACAGCGGTAA GATCCTTGAG  
GTGCTCACCC AATGTAGCTT GACCTAGAGT TGTCGCCATT CTAGGAACTC  
Amp (r)  
~~~~~  
4251 AGTTTCGCC CCGAAGAACG TTTCCAATG ATGAGCACTT TTAAAGTTCT
TCAAAAGCGG GGCTTCTTGC AAAAGGTTAC TACTCGTGAA AATTCAAGA
Amp (r)
~~~~~  
4301 GCTATGTGGC GCGGTATTAT CCCGTATTGA CGCCGGCAA GAGCAACTCG  
CGATACACCG CGCCATAATA GGGCATAACT GCGGCCCGTT CTCGTTGAGC  
Amp (r)  
~~~~~  
4351 GTCGCCGCAT ACACTATTCT CAGAATGACT TGGTTGAGTA CTCACCAGTC
CAGCGCGTA TGTGATAAGA GTCTTACTGA ACCAACTCAT GAGTGGTCAG
Amp (r)
~~~~~  
4401 ACAGAAAAGC ATCTTACGGA TGGCATGACA GTAAGAGAAT TATGCAGTGC  
TGTCTTTCG TAGAATGCCT ACCGTACTGT CATTCTCTTA ATACGTCACG  
Amp (r)  
~~~~~  
4451 TGCCATAACC ATGAGTGATA ACAGCGGC CAACTTACTT CTGACAACGA
ACGGTATTGG TACTCACTAT TGTGACGCCG GTTGAATGAA GACTGTTGCT
Amp (r)
~~~~~  
4501 TCGGAGGACC GAAGGGAGCTA ACCGCTTTTG TGACAAACAT GGGGGATCAT  
AGCCTCCTGG CTTCTCGAT TGGCGAAAAA ACGTGTTGTA CCCCTAGTA  
Amp (r)  
~~~~~  
4551 GTAACTCGCC TTGATCGTTG GGAACCGGAG CTGAATGAAG CCATACAAA
CATTGAGCGG AACTAGCAAC CCTTGGCCTC GACTTACTTC GGTATGGTT
Amp (r)
~~~~~  
4601 CGACGAGCGT GACACCACGA TGCCTGTAGC AATGGCAACA ACGTTGCGCA  
GCTGCTCGCA CTGTGGTGCT ACGGACATCG TTACCGTTGT TGCAACGCGT  
Amp (r)  
~~~~~

Table 12 (continued) Nucleotide sequence of pIB/V5-His-DEST (SEQ ID NO: 89).

4651 AACTATTAAC TGGCGAACTA CTTACTCTAG CTTCCCGGCA ACAATTAATA
TTGATAATTG ACCGCTTGAT GAATGAGATC GAAGGGCCGT TGTTAATTAT
Amp (r)
~~~~~  
4701 GACTGGATGG AGGCGGATAA AGTTGCAGGA CCACTTCTGC GCTCGGCCCT  
CTGACCTACC TCCGCCTATT TCAACGTCTT GGTGAAGACG CGAGCCGGGA  
Amp (r)  
~~~~~  
4751 TCCGGCTGGC TGGTTTATTG CTGATAAAC TGGAGCCGGT GAGCGTGGGT
AGGCCGACCG ACCAAATAAC GACTATTAG ACCTCGGCCA CTCGCACCCA
Amp (r)
~~~~~  
4801 CTCGCGGTAT CATTGCAGCA CTGGGGCCAG ATGGTAAGCC CTCCCGTATC  
GAGCGCCATA GTAACGTCGT GACCCCGGTC TACCATTGG GAGGGCATAG  
Amp (r)  
~~~~~  
4851 GTAGTTATCT ACACGACGGG GAGTCAGGCA ACTATGGATG AACGAAATAG
CATCAATAGA TGTGCTGCC CTCAGTCCGT TGATACCTAC TTGCTTTATC
Amp (r)
~~~~~  
4901 ACAGATCGCT GAGATAGGTG CCTCACTGAT TAAGCATTGG TAACTGTCAG  
TGTCTAGCGA CTCTATCCAC GGAGTGACTA ATTGTAACC ATTGACAGTC  
4951 ACCAAGTTA CTCATATATA CTTTAGATTG ATTTAAAATC TCATTTTAA  
TGGTTCAAAT GAGTATATAT GAAATCTAAC TAAATTTGA AGTAAAAATT  
5001 TTTAAAAGGA TCTAGGTGAA GATCCTTTT GATAATCT  
AAATTTCCCT AGATCCACTT CTAGGAAAAA CTATTAGA

Please amend Table 13 on pages 404-415 as follows:

Table 13: Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

ph promoter

~~~~~

1 ATAAGTATTT TACTGTTTC GTAACAGTT TGTAATAAAA AACCTATAA
TATTCAAAA ATGACAAAAG CATTGTAAA ACATTATTT TTTGGATATT
51 ATATTCCGGA TTATTCATAC CGTCCCACCA TCGGGCGCGG ATCCCCGGGT
TATAAGGCCT AATAAGTATG GCAGGGTGGT AGCCCGCGCC TAGGGGCCA
att R1

~~~~~

101 ACCGATATCA CAAGTTGTA CAAAAAAGCT GAACGAGAAA CGTAAAATGA  
TGGCTATAGT GTTCAAACAT GTTTTTCGA CTTGCTCTT GCATTTACT  
att R1

~~~~~

151 TATAAATATC AATATATTAA ATTAGATTT GCATAAAAAA CAGACTACAT
ATATTATAG TTATATAATT TAATCTAAA CGTATTTTT GTCTGATGTA
att R1

~~~~~

201 AATACTGTAA AACACAACAT ATCCAGTCAC TATGGCGGCC GCTCCCTAAC  
TTATGACATT TTGTGTTGTA TAGTCAGTG ATACCGCCGG CGAGGGATTG  
251 CCACGGGGCC CGTGGCTATG GCAGGGCTTG CCGCCCGAC GTTGGCTGCG  
GGTGCCCGG GCACCGATAC CGTCCCACAC GGCGGGGCTG CAACCGACGC  
301 AGCCCTGGGC CTTCACCCGA ACTTGGGGGT TGGGGTGGGG AAAAGGAAGA  
TCGGGACCCG GAAGTGGGCT TGAACCCCCA ACCCCACCCC TTTCCCTTCT  
351 AACGCGGGCG TATTGGTCCC AATGGGGTCT CGGTGGGTA TCGACAGAGT  
TTGCGCCCGC ATAACCAGGG TTACCCAGA GCCACCCAT AGCTGTCTCA  
401 GCCAGCCCTG GGACCGAACCC CCGCGTTTAT GAACAAACGA CCCAACACCC  
CGGTGGGAC CCTGGCTTGG GGCGCAAATA CTTGTTGCT GGGTTGTGGG  
451 GTGCGTTTA TTCTGTCTT TTATTGCCGT CATAGCGCGG GTTCCTTCCG  
CACGCAAAT AAGACAGAAA AATAACGGCA GTATCGCGCC CAAGGAAGGC  
501 GTATTGTCTC CTTCCGTGTT TCAGTTAGCC TCCCCCATCT CCCGGGCAA  
CATAACAGAG GAAGGCACAA AGTCAATCGG AGGGGGTAGA GGGCCCGTTT

~~~~~

tk gene

N A E G M E R A F

551 CGTGCACGCC AGGTGCGCAGA TCGTCGGTAT GGAGCCTGGG GTGGTGACGT
GCACGCGCGG TCCAGCGTCT AGCAGCCATA CCTCGGACCC CACCACTGCA

~~~~~

tk gene

T R A L D C I T P I S G P T T V H .

601 GGGTCTGGAC CATCCCAGAG GTAAGTTGCA GCAGGGCGTC CGGGCAGCCG  
CCCAGACCTG GTAGGGCCTC CATTCAACGT CGTCCCAGGGCAG GGCGTCGGC

~~~~~

tk gene

. T Q V M G S T L Q L L A D R C G A .

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

651 GCGGGCGATT GGTCTGAAATC CAGGATAAAAG ACATGCATGG GACGGAGGCG
CGCCCGCTAA CCAGCATTAG GTCCTATTTC TGTACGTACC CTGCCTCCGC
~~~~~  
tk gene  
.. P S Q D Y D L I F V H M P R L R  
701 TTTGGCCAAG ACGTCCAAAG CCCAGGAAA CACGTTATAC AGGTCGCCGT  
AAACCGGTTTC TGCAGGTTTC GGGTCCGTTT GTGCAATATG TCCAGCGGCA  
~~~~~  
tk gene
K A L V D L A W A F V N Y L D G N .
751 TGGGGGCCAG CAACTCGGGG GCCCGAAACA GGGTAAATAA CGTGTCCCCG
ACCCCCGGTC GTTGAGCCCC CGGGCTTTGT CCCATTATT GCACAGGGGC
~~~~~  
tk gene  
. P A L L E P A R F L T F L T D G I .  
801 ATATGGGTC GTGGGCCCGC GTTGCTCTGG GGCTCGGCAC CCTGGGGCGG  
TATAACCCAG CACCCGGGCG CAACGAGACC CCGAGCCGTG GGACCCCGCC  
~~~~~  
tk gene
.. H P R P G A N S Q P E A G Q P P
851 CACGGCCGCC CCCGAAAGCT GTCCCCAAC CTCGGCCAC GACCCGCCGC
GTGCCGGCGG GGGCTTCGA CAGGGTTAG GAGGGCGGTG CTGGCGGGCG
~~~~~  
tk gene  
V A A G S L Q G W D E R W S G G G .  
901 CCTGCAGATA CCGCACCGTA TTGGCAAGCA GCCCATAAAC GCGGCGAATC  
GGACGTCTAT GGCGTGGCAT AACCGTTCGT CGGGTATTG CGCCGCTTAG  
~~~~~  
tk gene
. Q L Y R V T N A L L G Y V R R I A .
951 CGGGCCAGCA TAGCCAGGTC AAGCCGCTCG CCGGGGCGCT GGCGTTGGC
CGCCGGTCGT ATCGGTCCAG TTCGGCGAGC GGCCCCGCGA CCGCAAACCG
~~~~~  
tk gene  
. A L M A L D L R E G P R Q R K A  
1001 CAGGCGGTG ATGTGTCTGT CCTCCGGAAG GGCCCCCAAC ACGATGTTTG  
GTCCGCCAGC TACACAGACA GGAGGCCTTC CCGGGGGTTG TGCTACAAAC  
~~~~~  
tk gene
L R D I H R D E P L A G L V I N T .
1051 TGCCGGCAA GGTCTGGCGGG ATGAGGGCCA CGAACGCCAG CACGGCCTGG
ACGGCCCGTT CCAGCCGCC TACTCCGGT GCTTGCGGTC GTGCCGGACC
~~~~~  
tk gene  
. G P L T P P I L A V F A L V A Q P .

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

1101 GGGGTCATGC TGCCCATAAG GTATCGCGCG GCCGGGTAGC ACAGGAGGGC  
 CCCCAGTACG ACGGGTATTG CATAGCGCGC CGGCCCATCG TGTCCCTCCG  
 ~~~~~  
 tk gene
 .. T M S G M L Y R A A P Y C L L A
 1151 GGCGATGGGA TGGCGGTGCA AGATGAGGGT GAGGGCCGGG GGCGGGGCAT
 CCGCTACCCT ACCGCCAGCT TCTACTCCCA CTCCCGGCC CCGCCCGTA
 ~~~~~  
 tk gene  
 A I P H R D F I L T L A P P P A H .  
 1201 GTGAGCTCCC AGCCTCCCCC CCGATATGAG GAGCCAGAAC GGCGTCGGTC  
 CACTCGAGGG TCGGAGGGGG GGCTATACTC CTCGGTCTTG CCGCAGCCAG  
 ~~~~~  
 tk gene
 . S S G A E G G I H P A L V A D T V .
 1251 ACGGCATAAG GCATGCCAT TGTTATCTGG GCGCTTGTCA TTACCAACCGC
 TGCCGTATTC CGTACGGGTA ACAATAGACC CGCGAACAGT AATGGTGGCG
 ~~~~~  
 tk gene  
 .. A Y P M G M T I Q A S T M V V A  
 1301 CGCGTCCCCG GCCGATATCT CACCCGGTC GAGGCGGTGT TGTGTGGTGT  
 GCGCAGGGC CGGCTATAGA GTGGGACCAAG CTCCGCCACA ACACACCACA  
 ~~~~~  
 tk gene
 A D G A S I E G Q D L R H Q T T Y .
 1351 AGATGTTCGC GATTGTCTCG GAAGCCCCCA ACACCCGCCA GTAAGTCATC
 TCTACAAGCG CTAACAGAGC CTTGGGGGT TGTGGCGGT CATTCACTAG
 ~~~~~  
 tk gene  
 . I N A I T E S A G L V R W Y T M P .  
 1401 GGCTCGGGTA CGTAGACGAT ATCGTCGCGC GAACCCAGGG CCACCCAGCAG  
 CCGAGCCCAT GCATCTGCTA TAGCAGCGCG CTTGGGTCCC GGTGGTCGTC  
 ~~~~~  
 tk gene
 .. E P V Y V I D D R S G L A V L L
 1451 TTGCGTGGTG GTGGTTTCC CCATCCCGTG GGGACCGTCT ATATAAACCC
 AACGCACCAAC CACCAAAAGG GGTAGGGCAC CCCTGGCAGA TATATTTGGG
 ~~~~~  
 tk gene  
 Q T T T T K G M G H P G D I Y V R .  
 1501 GCAGTAGCGT GGGCATTTC TGCTCCAGGC GGACTTCCGT GGCTTTTGT  
 CGTCATCGCA CCCGTAAAAG ACGAGGTCCG CCTGAAGGCA CCGAAAAACA  
 ~~~~~  
 tk gene
 . L L T P M K Q E L R V E T A K Q Q .

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

1551	TGCCGGCGAG GGCGCAACGC CGTACGTCGG TTGTTATGGC CGCGAGAACG ACGGCCGCTC CCGCGTTGCG GCATGCAGCC AACAAATACCG GCGCTCTTGC ~~~~~ tk gene
1601	.. R R P R L A T R R N N H G R S R CGCAGCCTGG TCGAACGCAG ACACGTGTTG ATGGCAGGGG TACGAAGCCA GCGTCGGACC AGCTTGCGTC TGCGCACAAAC TACCGTCCCC ATGCTTCGGT ~~~~~ tk gene
1651	A A Q D F A S A H Q H C P Y S A M . TAGATCCC GT TATCAATTAC TTATACTATC CGGCGCGCAA GCGAGCGTGT ATCTAGGGCA ATAGTTAATG AATATGATAG GCCGCGCGTT CGCTCGCACA ~~~~~ ie-0 promoter
1701	GCGCCGGAGC ACAATTGATA CTGATTACG AGTTGGGCAA ACAGGGCTTTA CGCGGCCCTCG TGTAACTAT GACTAAATGC TCAACCCGTT TGCCCGAAAT ~~~~~ ie-0 promoter
1751	TATAGCCTGT CCCCTCCACA GCCCTAGTGC CGTGCAGCAA GTGCCTACGT ATATCGGACA GGGGAGGTGT CGGGATCACG GCACGCGTTT CACGGATGCA ~~~~~ ie-0 promoter
1801	GACCAGGCTC TCCTACCGAT ATACAATCTT ATCTCTATAG ATAAGGTTTC CTGGTCCGAG AGGATGCGTA TATGTTAGAA TAGAGATATC TATTCCAAAG ~~~~~ ie-0 promoter
1851	CATATATAAA GCCTCTCGAT GGCTGAACGT GCACAGTATC GTGTTGATT GTATATATTT CGGAGAGCTA CCGACTTGCA CGTGTATAG CACAACAAA ~~~~~ ie-0 promoter
1901	CTGAGTGCTA ACTAACAGTT ACAATGAACC GTTTTTTCG AGAGAATAAC GACTCACGAT TGATTGTCAA TGTTACTTGG CAAAAAAAGC TCTCTTATTG ~~~~~ ie-0 promoter
1951	ATTTTGACG CGCCAAGGAC CGGGGGCAAG GGTGCGCCA AATCTTGCC TAAAAACTGC GCGGTTCTG GCCCCCCGTT CCAGCACGGT TTAGAAACGG ~~~~~ ie-0 promoter
2001	AGCGCCTGCC GCCAACTCGC CGCCGTGCC TGTTGTCGG CCGCCAAAAT TCGCGGACGG CGGTTGAGCG GCGGCAGCGG ACAAGCAGGC GGCGGTTTA ~~~~~ ie-0 promoter
2051	CTAACATCAA ACCACCTACG CGCATCTCTC CGCCTAAACA GCCTATGTGC GATTGTAGTT TGGTGGATGC GCGTAGAGAG GCGGATTGT CGGATACACG ~~~~~ ie-0 promoter

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

2101	ACCTCTCCGG CCAAGCCGTT GGAGCACAGC AGCATTGTAA GTAAAAAAACC TGGAGAGGCC GGTCGGCAA CCTCGTGTG TCGTAACATT CATTTTTGG ~~~~~ ie-0 promoter
2151	AGTCGTCAAC AGAAAAGATG GATATTTGT GCCGCCGAG TTTGGGAACA TCAGCAGTTG TCTTTCTAC CTATAAAACA CGGCGGGCTC AAACCCCTTGT ~~~~~ ie-0 promoter
2201	AGTTTGAAGG TTTGCCCGCG TACAGCGACA AACTGGATT CAAACAAGAG TCAAACCTTCC AAACGGGCGC ATGTCGCTGT TTGACCTAAA GTTTGTTCTC ~~~~~ ie-0 promoter
	p10 promoter
2251	CGCGATCTAC GTACCTGCAG GCCCGGGCTC AACCCAACAC AATATATTAT GCGCTAGATG CATGGACGTC CGGGCCCCGAG TTGGGTTGTG TTATATAATA p10 promoter
2301	AGTTAAATAA GAATTATTAT CAAATCATTT GTATATTAAT TAAAATACTA TCAATTATT CTTAATAATA GTTTAGTAAA CATATAATT ATTATATGAT p10 promoter
	lacZ
	~~~~~ M T M I T .
2351	TACTGTAAAT TACATTTAT TTACAATTCA CTCTAGAACG ACCATGATTA ATGACATTAA ATGTAAAATA AATGTTAAGT GAGATCTTAC TGGTACTAAT lacZ
	~~~~~ . D S L A V V L Q R R D W E N P G
2401	CGGATTCACT GGCCGTCGTT TTACAACGTC GTGACTGGGA AAACCCCTGGC GCCTAAGTGA CCGGCAGCAA AATGTTGCAG CACTGACCCT TTTGGGACCG lacZ
	~~~~~ V T Q L N R L A A H P P F A S W R .
2451	GTTACCCAAC TTAATCGCCT TGCAAGCACAT CCCCTTTCG CCAGCTGGCG CAATGGGTTG AATTAGCGGA ACGTCGTGTA GGGGGAAAGC GGTCGACCGC lacZ
	~~~~~ . N S E E A R T D R P S Q Q L R S L .
2501	TAATAGCGAA GAGGCCCGCA CCGATCGCCC TTCCCAACAG TTGGCGAGCC ATTATCGCTT CTCCGGGCGT GGCTAGCGGG AAGGGTTGTC AACCGTCGG lacZ
	~~~~~ . N G E W R F A W F P A P E A V P

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

2551 TGAATGGCGA ATGGCGCTTT GCCTGGTTTC CGGCACCAGA AGCGGTGCCG  
ACTTACCGCT TACCGCGAAA CGGACCAAAG GCCGTGGTCT TCGCCACGGC  
lacZ  
~~~~~  
Bsu36I
~~~~~  
E S W L E C D L P E A D T V V V P ·  
2601 GAAAGCTGGC TGGAGTGCGA TCTTCCTGAG GCCGATACTG TCGTCGTCCC  
CTTTCGACCG ACCTCACGCT AGAAGGACTC CGGCTATGAC AGCAGCAGGG  
lacZ  
~~~~~  
· S N W Q M H G Y D A P I Y T N V T ·
2651 CTCAAACTGG CAGATGCACG GTTACGATGC GCCCATCTAC ACCAACGTAA
GAGTTTGACC GTCTACGTGC CAATGCTACG CGGGTAGATG TGGTTGCATT
lacZ
~~~~~  
· Y P I T V N P P F V P T E N P T  
2701 CCTATCCCAT TACGGTCAAT CCGCCGTTTG TTCCCACGGA GAATCCGACG  
GGATAGGGTA ATGCCAGTTA GGC GGCAAAC AAGGGTGCCT CTTAGGCTGC  
lacZ  
~~~~~  
G C Y S L T F N V D E S W L Q E G ·
2751 GGTTGTTACT CGCTCACATT TAATGTTGAT GAAAGCTGGC TACAGGAAGG
CCAACAATGA GCGAGTGTAA ATTACAACCA CTTTCGACCG ATGTCCTTCC
lacZ
~~~~~  
· Q T R I I F D G V N S A F H L W C ·  
2801 CCAGACCGCGA ATTATTTTG ATGGCGTTAA CTCGGCGTTT CATCTGTGGT  
GGTCTGGCCT TAATAAAAAC TACCGCAATT GAGCCGCAAAC GTAGACACCA  
lacZ  
~~~~~  
· N G R W V G Y G Q D S R L P S E
2851 GCAACGGCG CTGGGTGGT TACGGCCAGG ACAGTCGTTT GCCGTCTGAA
CGTTGCCCGC GACCCAGCCA ATGCCGGTCC TGTCAGCAAA CGGCAGACTT
lacZ
~~~~~  
F D L S A F L R A G E N R L A V M ·  
2901 TTTGACCTGA GCGCATTGGT ACGCGCCGGA GAAAACCGCC TCGCGGTGAT  
AAACTGGACT CGCGTAAAAA TGCGCGGCCT CTTTGCGGG AGCGCCACTA  
lacZ  
~~~~~  
· V L R W S D G S Y L E D Q D M W R ·

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

2951 GGTGCTGCGT TGGAGTGACG GCAGTTATCT GGAAGATCAG GATATGTGGC
CCACGACGCA ACCTCACTGC CGTCAATAGA CCTTCTAGTC CTATACACCG
lacZ
~~~~~  
· M S G I F R D V S L L H K P T T ·  
3001 GGATGAGCGG CATTTCGGT GACGTCTCGT TGCTGCATAA ACCGACTACA  
CCTACTCGCC GTAAAAGGCA CTGCAGAGCA ACGACGTATT TGGCTGATGT  
lacZ  
~~~~~  
Q I S D F H V A T R F N D D F S R ·
3051 CAAATCAGCG ATTTCCATGT TGCCACTCGC TTTAATGATG ATTCAGCCG
GTTTAGTCGC TAAAGGTACA ACGGTGAGCG AAATTACTAC TAAAGTCGGC
lacZ
~~~~~  
· A V L E A E V Q M C G E L R D Y L ·  
3101 CGCTGTACTG GAGGCTGAAG TTCAGATGTG CGCGAGTTG CGTGACTACC  
GCGACATGAC CTCCGACTTC AAGTCTACAC GCCGCTCAAC GCACTGATGG  
lacZ  
~~~~~  
· R V T V S L W Q G E T Q V A S G ·
3151 TACGGGTAAC AGTTTCTTTA TGGCAGGGTG AAACGCAGGT CGCCAGCGGC
ATGCCCATTG TCAAAGAAAT ACCGTCCCAC TTTGCGTCCA GCGGTCGCCG
lacZ
~~~~~  
T A P F G G E I I D E R G G Y A D ·  
3201 ACCGCGCCCTT TCGGCGGTGA AATTATCGAT GAGCGTGGTG GTTATGCCGA  
TGGCGCGAA AGCCGCCACT TTAATAGCTA CTCGCACCAC CAATACGGCT  
lacZ  
~~~~~  
· R V T L R L N V E N P K L W S A E ·
3251 TCGCGTCACA CTACGTCTGA ACGTCGAAAA CCCGAAACTG TGGAGCGCCG
AGCGCAGTGT GATGCAGACT TGCAGCTTT GGGCTTGAC ACCTCGCGGC
lacZ
~~~~~  
· I P N L Y R A V V E L H T A D G ·  
3301 AAATCCGAA TCTCTATCGT GCGGTGGTTG AACTGCACAC CGCCGACGGC  
TTTAGGGCTT AGAGATAGCA CGCCACCAAC TTGACGTGTG GCGGCTGCCG  
lacZ  
~~~~~  
T L I E A E A C D V G F R E V R I ·
3351 ACGCTGATTG AAGCAGAAGC CTGCGATGTC GGTTTCCGCG AGGTGCGGAT
TGCGACTAAC TTCGTCTTCG GACGCTACAG CCAAAGGCAG TCCACGCCTA
lacZ
~~~~~  
· E N G L L L N G K P L L I R G V ·

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

3401 TGAAAATGGT CTGCTGCTGC TGAACGGCAA GCCGTTGCTG ATTGAGGGCG  
ACTTTTACCA GACGACGACG ACTTGCCGTT CGGCAACGAC TAAGCTCCGC  
lacZ  
~~~~~  
· N R H E H H P L H G Q V M D E Q
3451 TTAACCGTCA CGAGCATCAT CCTCTGCATG GTCAGGTCAT GGATGAGCAG
AATTGGCAGT GCTCGTAGTA GGAGACGTAC CAGTCCAGTA CCTACTCGTC
lacZ
~~~~~  
T M V Q D I L L M K Q N N F N A V ·  
3501 ACGATGGTGC AGGATATCCT GCTGATGAAG CAGAACAACT TAAACGCCGT  
TGCTACCACG TCCTATAGGA CGACTACTTC GTCTTGTGA AATTGCGGCA  
lacZ  
~~~~~  
· R C S H Y P N H P L W Y T L C D R ·
3551 GCGCTGTTCG CATTATCCGA ACCATCCGCT GTGGTACACG CTGTGCGACC
CGCGACAAGC GTAATAGGCT TGGTAGGCGA CACCATGTGC GACACGCTGG
lacZ
~~~~~  
· Y G L Y V V D E A N I E T H G M  
3601 GCTACGGCCT GTATGTGGTG GATGAAGCCA ATATTGAAAC CCACGGCATG  
CGATGCCGGA CATAACACCAC CTACTTCGGT TATAACTTG GGTGCCGTAC  
lacZ  
~~~~~  
V P M N R L T D D P R W L P A M S ·
3651 GTGCCAATGA ATCGTCTGAC CGATGATCCG CGCTGGCTAC CGGCGATGAG
CACGGTTACT TAGCAGACTG GCTACTAGGC GCGACCGATG GCCGCTACTC
lacZ
~~~~~  
· E R V T R M V Q R D R N H P S V I ·  
3701 CGAACCGCGTA ACGCGAATGG TGCAGCGCGA TCGTAATCAC CCGAGTGTGA  
GCTTGCGCAT TGCGCTTACC ACGTCGCGCT AGCATTAGTG GGCTCACACT  
lacZ  
~~~~~  
· I W S L G N E S G H G A N H D A
3751 TCATCTGGTC GCTGGGAAT GAATCAGGCC ACGGCGCTAA TCACGACGCG
AGTAGACCAG CGACCCCTTA CTTAGTCCGG TGCCGCGATT AGTGTGCGC
lacZ
~~~~~  
L Y R W I K S V D P S R P V Q Y E ·  
3801 CTGTATCGCT GGATCAAATC TGTGATCCT TCCCAGCCGG TGCAGTATGA  
GACATAGCGA CCTAGTTAG ACAGCTAGGA AGGGCGGGCC ACGTCATACT  
lacZ  
~~~~~  
· G G G A D T T A T D I I C P M Y A ·

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

3851 AGGCAGGGCGGA GCCGACACCA CGGCCACCGA TATTATTTGC CCGATGTACG
TCCGCCGCCT CGGCTGTGGT GCCGGTGGCT ATAATAAACG GGCTACATGC
lacZ

3901 . R V D E D Q P F P A V P K W S I
CGCGCGTGGA TGAAGACCAAG CCCTTCCCAG CTGTGCCGAA ATGGTCCATC
GCGCGCACCT ACTTCTGGTC GGGAAAGGGCC GACACGGCTT TACCAGGTAG
lacZ

3951 K K W L S L P G E T R P L I L C E .
AAAAAAATGGC TTTCGCTACC TGGAGAGACG CGCCCGCTGA TCCTTGCGA
TTTTTACCG AAAGCGATGG ACCTCTCTGC GCGGGCGACT AGGAAACGCT
lacZ

4001 . Y A H A M G N S L G G F A K Y W Q .
ATACGCCAC GCGATGGGTA ACAGTCTTGG CGGTTTCGCT AAATACTGGC
TATGCGGGTG CGCTACCCAT TGTCAGAACCC GCAAAGCGA TTTATGACCG
lacZ

4051 . A F R Q Y P R L Q G G F V W D W
AGGCAGTTTCG TCAGTATCCC CGTTTACAGG GCGGCTTCGT CTGGGACTGG
TCCGCAAAGC AGTCATAGGG GCAAATGTCC CGCCGAAGCA GACCTGACC
lacZ

4101 V D Q S L I K Y D E N G N P W S A .
GTGGATCAGT CGCTGATTAA ATATGATGAA AACGGCAACC CGTGGTCGGC
CACCTAGTCA GCGACTAATT TATACTACTT TTGCCGTTGG GCACCAGCCG
lacZ

4151 . Y G G D F G D T P N D R Q F C M N .
TTACGGCGGT GATTTGGCG ATACGCCAA CGATGCCAG TTCTGTATGA
AATGCCGCCA CTAAAACCGC TATGCGGCTT GCTAGCGGTC AAGACATACT
lacZ

4201 . G L V F A D R T P H P A L T E A
ACGGTCTGGT CTTTGCCGAC CGCACGCCGC ATCCAGCGCT GACGGAAGCA
TGCCAGACCA GAAACGGCTG GCGTGCAGCG TAGGTCGCGA CTGCCTTCGT
lacZ

4251 K H Q Q Q F F Q F R L S G Q T I E .
AAACACCAGC AGCAGTTTT CCAGTTCCGT TTATCCGGGC AAACCATCGA
TTTGTGGTCG TCGTCAAAAAA GGTCAAGGCA AATAGGCCCCG TTTGGTAGCT
lacZ

. V T S E Y L F R H S D N E L L H W .

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

4301 AGTGACCAGC GAATAACCTGT TCCGTCATAG CGATAACGAG CTCCTGCACT
TCACTGGTCG CTTATGGACA AGGCAGTATC GCTATTGCTC GAGGACGTGA
lacZ
~~~~~  
· M V A L D G K P L A S G E V P L ·  
4351 GGATGGTGGC GCTGGATGGT AAGCCGCTGG CAAGCGGTGA AGTGCCTCTG  
CCTACCACCG CGACCTACCA TTCGGCGACC GTTCGCCACT TCACGGAGAC  
lacZ  
~~~~~  
D V A P Q G K Q L I E L P E L P Q ·
4401 GATGTCGCTC CACAAGGTAA ACAGTTGATT GAACTGCCTG AACTACCGCA
CTACAGCGAG GTGTTCCATT TGTCAACTAA CTTGACGGAC TTGATGGCGT
lacZ
~~~~~  
· P E S A G Q L W L T V R V V Q P N ·  
4451 GCCGGAGAGC GCCGGGCAAC TCTGGCTCAC AGTACGCGTA GTGCAACCGA  
CGGCCTCTCG CGGCCCGTTG AGACCGAGTG TCATGCGCAT CACGTTGGCT  
lacZ  
~~~~~  
· A T A W S E A G H I S A W Q Q W ·
4501 ACAGCAGCCGC ATGGTCAGAA GCCGGGCACA TCAGCGCCTG GCAGCAGTGG
TGCCTGGCG TACCAAGTCTT CGGCCCGTGT AGTCGCGGAC CGTCGTCACC
lacZ
~~~~~  
R L A E N L S V T L P A A S H A I ·  
4551 CGTCTGGCGG AAAACCTCAG TGTGACGCTC CCCGCCGCGT CCCACGCCAT  
GCAGACCGCC TTTGGAGTC ACACTGCGAG GGGCGGCGCA GGGTGCGGTA  
lacZ  
~~~~~  
· P H L T T S E M D F C I E L G N K ·
4601 CCCGCATCTG ACCACCAGCG AAATGGATT TTGCATCGAG CTGGGTAATA
GGCGTAGAC TGGTGGTCGC TTTACCTAAA AACGTAGCTC GACCCATTAT
lacZ
~~~~~  
· R W Q F N R Q S G F L S Q M W I ·  
4651 AGCGTTGGCA ATTTAACCGC CAGTCAGGCT TTCTTTACA GATGTGGATT  
TCGCAACCGT TAAATTGGCG GTCAGTCCGA AAGAAAGTGT CTACACCTAA  
lacZ  
~~~~~  
G D K K Q L L T P L R D Q F T R A ·
4701 GGCGATAAAA AACAACTGCT GACGCCGCTG CGCGATCAGT TCACCCGTGC
CCGCTATTT TTGTTGACGA CTGCGGCGAC GCGCTAGTCA AGTGGGCACG
lacZ
~~~~~  
· P L D N D I G V S E A T R I D P N ·

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

4751 ACCGCTGGAT AACGACATTG GCGTAAGTGA AGCGACCCGC ATTGACCCTA  
TGGCGACCTA TTGCTGTAAC CGCATTCACT TCGCTGGGCG TAACCTGGAT  
lacZ

---

4801 · A W V E R W K A A G H Y Q A E A  
ACGCCTGGGT CGAACGCTGG AAGGCCGGCG GCCATTACCA GGCGAAGCA  
TGCGGACCCA GCTTGCAGCC TTCCGCCCG CGGTAATGGT CCGGCTTCGT  
lacZ

---

4851 A L L Q C T A D T L A D A V L I T ·  
GCGTTGTTGC AGTGCACGGC AGATACACTT GCTGATGCCG TGCTGATTAC  
CGCAACAACG TCACGTGCCG TCTATGTGAA CGACTACGCC ACGACTAATG  
lacZ

---

4901 · T A H A W Q H Q G K T L F I S R K ·  
GACCGCTCAC GCGTGGCAGC ATCAGGGAA AACCTTATTT ATCAGCCGGA  
CTGGCGAGTG CGCACCGTCG TAGTCCCCTT TTGGAATAAA TAGTCGGCCT  
lacZ

---

4951 · T Y R I D G S G Q M A I T V D V  
AACACCTACCG GATTGATGGT AGTGGTCAAA TGGCGATTAC CGTTGATGTT  
TTTGGATGGC CTAACTACCA TCACCAAGTTT ACCGCTAATG GCAACTACAA  
lacZ

---

5001 E V A S D T P H P A R I G L N C Q ·  
GAAGTGGCGA GCGATACACC GCATCCGGCG CGGATTGGCC TGAAC TGCCCA  
CTTCACCGCT CGCTATGTGG CGTAGGCCGC GCCTAACCGG ACTTGACGGT  
lacZ

---

5051 · L A Q V A E R V N W L G L G P Q E ·  
GCTGGCGCAG GTAGCAGAGC GGGTAAACTG GCTCGGATTA GGGCCGCAAG  
CGACCGCGTC CATCGTCTCG CCCATTGAC CGAGCCTAAT CCCGGCGTTC  
lacZ

---

5101 · N Y P D R L T A A C F D R W D L  
AAAAACTATCC CGACCGCCTT ACTGCCGCCT GTTTGACCG CTGGGATCTG  
TTTGATAGG GCTGGCGGAA TGACGGCGGA CAAAAGTGGC GACCCTAGAC  
lacZ

---

5151 P L S D M Y T P Y V F P S E N G L ·  
CCATTGTCAG ACATGTATAC CCCGTACGTC TTCCCGAGCG AAAACGGTCT  
GGTAACAGTC TGTACATATG GGGCATGCAG AAGGGCTCGC TTTGCCAGA  
lacZ

---

· R C G T R E L N Y G P H Q W R G D ·

Table 13 (continued) Nucleotide sequence of the V5-His DEST cassette (SEQ ID NO: 90).

5201 GCGCTGCGGG ACGCGCGAAT TGAATTATGG CCCACACCAG TGGCGCGGGCG  
CGCGACGCCCG TGCGCGCTTA ACTTAATACC GGGTGTGGTC ACCCGCGCCGC  
lacZ

---

5251 . F Q F N I S R Y S Q Q Q L M E T  
ACTTCCAGTT CAACATCAGC CGCTACAGTC AACAGCAACT GATGGAAACC  
TGAAGGTCAA GTTGTAGTCG GCGATGTCAG TTGTCGTTGA CTACCTTTGG  
lacZ

---

5301 S H R H L L H A E E G T W L N I D .  
AGCCATCGCC ATCTGCTGCA CGCGGAAGAA GGACATGGC TGAATATCGA  
TCGGTAGCGG TAGACGACGT GCGCCTTCTT CCGTGTACCG ACTTATAGCT  
lacZ

---

5351 . G F H M G I G G D D S W S P S V S .  
CGGTTTCCAT ATGGGGATTG GTGGCGACGA CTCCCTGGAGC CCGTCAGTAT  
GCCAAAGGTA TACCCCTAAC CACCGCTGCT GAGGACCTCG GGCAGTCATA  
lacZ

---

5401 . A E F Q L S A G R Y H Y Q L V W  
CGGCGGAATT CCAGCTGAGC GCCGGTCCGCT ACCATTACCA GTTGGTCTGG  
GCCGCCTTAA GGTGACTCG CGGCCAGCGA TGTTAATGGT CAACCAGACC  
lacZ Attr2

---

5451 C Q K  
TGTCAAAAAT AATGACTGCA GGTGACCAT AGTGACTGGA TATGTTGTGT  
ACAGTTTTA TTACTGACGT CCAGCTGGTA TCACTGACCT ATACAACACA  
Attr2

---

5501 TTTACAGTAT TATGTTAGTCT GTTTTTATG CAAAATCTAA TTTAATATAT  
AAATGTCATA ATACATCAGA CAAAAAATAC GTTTAGATT AAATTATATA  
Attr2

---

5551 TGATATTAT ATCATTTCAC GTTTCTCGTT CAGCTTCCTT GTACAAAGTG  
ACTATAAATA TAGTAAAATG CAAAGAGCAA GTCGAAAGAA CATGTTTCAC  
Attr2 V5/His

---

5601 G K P I P N P L L G .  
GTGAGAATGA ATGAAGATCT GGGGAAGCCT ATCCCTAACCC CTCTCCTCGG  
CACTCTTACT TACTTCTAGA CCCCTTCGGA TAGGGATTGG GAGAGGAGCC  
V5/His

---

5651 . L D S T R T G H H H H H H H  
TCTCGATTCT ACGCGTACCG GTCATCATCA CCATCACCAT TGA  
AGAGCTAAGA TGCGCATGGC CAGTAGTAGT GGTAGTGGTA ACT

Please amend Table 14 on pages 416-428 as follows:

Table 14: Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

ph promoter  
~~~~~  
1 ATAAGTATTT TACTGTTTC GTAACAGTT TGTAATAAAA AACCTATAA
TATTCAAAA ATGACAAAAG CATTGTAAA ACATTATT TTGGATATT
51 ATATTCCGGA TTATTCATAC CGTCCCACCA TCGGGCGCGG ATCCTATAAA
TATAAGGCCT AATAAGTATG GCAGGGTGGT AGCCCGGCC TAGGATATT
Melittin signal
~~~~~  
101 M K F L V N V A L V F M V V Y I S .  
TATGAAATTC TTAGTCAACG TTGCCCTTGT TTTTATGGTC GTATACATT  
ATACTTTAAG AATCAGTTGC AACGGGAACA AAAATACCAAG CATATGTAAA  
Melittin signal attR1  
~~~~~  
151 . Y I Y A
CTTACATCTA TGCAGCATGG TCGAATCAA CAAGTTGTA CAAAAAAGCT
GAATGTAGAT ACGCCGTACC AGCTTAGTT GTCAAACAT GTTTTTCGA
attR1
~~~~~  
201 GAACGAGAAA CGTAAAATGA TATAAATATC AATATATTAA ATTAGATTT  
CTTGCTCTT GCATTTACT ATATTATAG TTATATAATT TAATCTAAAA  
attR1  
~~~~~  
251 GCATAAAAAA CAGACTACAT AATACTGTA AACACAACAT ATCCAGTCAC
CGTATTTTT GTCTGATGTA TTATGACATT TTGTGTTGTA TAGGTCAGTG
301 TATGGCGGCC GCTCCCTAAC CCACGGGCC CGTGGCTATG GCAGGGCTTG
ATACCGCCGG CGAGGGATTG GGTGCCCGG GCACCGATAC CGTCCCGAAC
351 CCGCCCCGAC GTTGGCTGCG AGCCCTGGGC CTTCACCCGA ACTTGGGGGT
GGCGGGGCTG CAACCGACGC TCGGGACCCG GAAAGTGGGCT TGAACCCCCA
401 TGGGGTGGGG AAAAGGAAGA AACCGGGCG TATTGGTCCC AATGGGGTCT
ACCCCACCCC TTTTCCTCT TTGCGCCCGC ATAACCAGGG TTACCCCAGA
451 CGGTGGGGTA TCGACAGAGT GCCAGCCCTG GGACCGAACCC CCGCGTTTAT
GCCACCCCAT AGCTGTCTCA CGGTGGGAC CCTGGCTTGG GGCACAAATA
501 GAACAAACGA CCCAACACCC GTGCGTTTA TTCTGTCTT TTATTGCCGT
CTTGTGGCT GGGTTGTGGG CACGAAAAT AAGACAGAAA AATAACGGCA
551 CATAGCGCGG GTTCCTTCCG GTATTGTCTC CTCCGTGTT TCAGTTAGCC
GTATCGCGCC CAAGGAAGGC CATAACAGAG GAAGGCACAA AGTCAATCGG
~~~  
tk gene  
N A E .  
601 TCCCCCATCT CCCGGGCAA CGTGCAGGCC AGGTCGCAGA TCGTCGGTAT  
AGGGGGTAGA GGGCCCGTTT GCACGCGCGG TCCAGCGTCT AGCAGGCCATA  
~~~~~  
tk gene
.. G M E R A F T R A L D C I T P I

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

651	GGAGCCTGGG GTGGTGACGT GGGTCTGGAC CATCCCGGAG GTAAGTTGCA CCTCGGACCC CACCACTGCA CCCAGACCTG GTAGGGCCTC CATTCAACGT
701	tk gene S G P T T V H T Q V M G S T L Q L . GCAGGGCGTC CCGGCAGCCG GCAGGGCGATT GGTGTAATC CAGGATAAAG CGTCCCGCAG GGCGTCCGC CGCCCGCTAA CCAGCATTAG GTCTATTTC
751	tk gene . L A D R C G A P S Q D Y D L I F V . ACATGCATGG GACGGAGGCG TTTGGCCAAG ACGTCCAAG CCCAGGCAA TGTACGTACC CTGCCTCCGC AAACCGGTTTC TGAGGTTTC GGGTCCGTTT
801	tk gene . . H M P R L R K A L V D L A W A F CACGTTATAC AGGTGCGCGT TGGGGGCCAG CAACTCGGGG GCCCGAAACA GTGCAATATG TCCAGCGGCA ACCCCCAGTC GTTGAGCCCC CGGGCTTTGT
851	tk gene V N Y L D G N P A L L E P A R F L . GGGTAAATAA CGTGTCCCCG ATATGGGTC GTGGGCCCGC GTTGCTCTGG CCCATTATT GCACAGGGGC TATAACCCAG CACCCGGCG CAACGAGACC
901	tk gene . T F L T D G I H P R P G A N S Q P . GGCTCGGCAC CCTGGGGCGG CACGGCCGCC CCCGAAAGCT GTCCCCAATC CCGAGCCGTG GGACCCCGCC GTGCCGGCGG GGGCTTCGA CAGGGGTTAG
951	tk gene . . E A G Q P P V A A G S L Q G W D CTCCCGCCAC GACCCGCCGC CCTGCAGATA CCGCACCGTA TTGGCAAGCA GAGGGCGGTG CTGGGCGCGG GGACGTCTAT GGCGTGGCAT AACCGTTCGT
1001	tk gene E R W S G G G Q L Y R V T N A L L . GCCCATAAAC GCGGCGAATC GCGGCCAGCA TAGCCAGGTC AAGCCGCTCG CGGGTATTTG CGCCGCTTAG CGCCGGTCGT ATCGGTCCAG TTCGGCGAGC
1051	tk gene . G Y V R R I A A L M A L D L R E G . CGGGGGCGCT GGCGTTGGC CAGGCGGTG ATGTGTCTGT CCTCCGGAAG GGCCCCCGCA CCGCAAACCG GTCCGCCAGC TACACAGACA GGAGGCCTTC
	tk gene . . P R Q R K A L R D I H R D E P L

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

1101 GGCCCCAAC ACGATGTTG TGCCGGCAA GGTGGCGGG ATGAGGGCCA
 CCGGGGGTTG TGCTACAAAC ACGGCCCGTT CCAGCCGCC TACTCCGGT
 ~~~~~  
 tk gene  
 A G L V I N T G P L T P P I L A V .  
 1151 CGAACGCCAG CACGGCCTGG GGGGTCAAG TGCCCATAAG GTATCGCGCG  
 GCTTGCGGTC GTGCCGGACC CCCCCAGTACG ACGGGTATTG CATAGCGCGC  
 ~~~~~  
 tk gene
 . F A L V A Q P T M S G M L Y R A A .
 1201 GCCGGGTAGC ACAGGAGGGC GGCATGGGA TGGCGGTGAG AGATGAGGGT
 CGGCCCATCG TGTCCCTCCCG CCGCTACCCCT ACCGCCAGCT TCTACTCCCA
 ~~~~~  
 tk gene  
 .. P Y C L L A A I P H R D F I L T  
 1251 GAGGGCCGGG GGCGGGGCAT GTGAGCTCCC AGCCTCCCCC CCGATATGAG  
 CTCCCGGCC CCGCCCCGTA CACTCGAGGG TCGGAGGGGG GGCTATACTC  
 ~~~~~  
 tk gene
 L A P P P A H S S G A E G G I H P .
 1301 GAGCCAGAAC GGCGTCGGTC ACGGCATAAG GCATGCCAT TGTTATCTGG
 CTCGGTCTTG CCGCAGCCAG TGCCGTATTG CGTACGGGTA ACAATAGACC
 ~~~~~  
 tk gene  
 . A L V A D T V A Y P M G M T I Q A .  
 1351 GCGCTTGTCA TTACCAACCGC CGCGTCCCCG GCCGATATCT CACCCCTGGTC  
 CGCGAACAGT AATGGTGGCG GCGCAGGGC CGGCTATAGA GTGGGACCAAG  
 ~~~~~  
 tk gene
 .. S T M V V A A D G A S I E G Q D
 1401 GAGGCGGGTGT TGTGTGGTGT AGATGTTCGC GATTGTCTCG GAAGCCCCCA
 CTCCGCCACA ACACACCACA TCTACAAGCG CTAACAGAGC CTTGGGGGGT
 ~~~~~  
 tk gene  
 L R H Q T T Y I N A I T E S A G L .  
 1451 ACACCCGCCA GTAAAGTCATC GGCTCGGGTA CGTAGACGAT ATCGTCGCGC  
 TGTGGCGGT CATTCAAGTAG CCGAGCCCAT GCATCTGCTA TAGCAGCGCG  
 ~~~~~  
 tk gene
 . V R W Y T M P E P V Y V I D D R S .
 1501 GAACCCAGGG CCACCAAGCAG TTGCGTGGTG GTGGTTTTCC CCATCCCCTG
 CTTGGGTCCC GGTGGTCGTC AACGCACCAC CACCAAAAGG GGTAGGGCAC
 ~~~~~  
 tk gene  
 .. G L A V L L Q T T T T K G M G H

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

1551 GGGACCGTCT ATATAAACCC GCAGTAGCGT GGGCATTTC TGCTCCAGGC  
 CCCTGGCAGA TATATTTGGG CGTCATCGCA CCCGTAAAAG ACGAGGTCCG  
 ~~~~~  
 tk gene
 P G D I Y V R L L T P M K Q E L R .
 1601 GGACTTCCGT GGCTTTTGT TGCCGGCGAG GCGCAGCACGC CGTACGTCGG
 CCTGAAGGCA CCGAAAAACA ACGGCCGCTC CCGCGTTGCG GCATGCAGCC
 ~~~~~  
 tk gene  
 . V E T A K Q Q R R P R L A T R R N .  
 1651 TTGTTATGGC CGCGAGAACG CGCAGCCTGG TCGAACGCAG ACGCGTGTG  
 AACAAATACCG GCGCTCTTGC GCGTCGGACC AGCTTGCCTC TGCGCACAAAC  
 ~~~~~  
 tk gene
 .. N H G R S R A A Q D F A S A H Q
 1701 ATGGCAGGGG TACGAAGCCA TAGATCCC GT TATCAATTAC TTATACTATC
 TACCGTCCCC ATGCTTCGGT ATCTAGGGCA ATAGTTAATG AATATGATAG
 ~~~~~  
 tk gene ie-0  
 pr  
 H C P Y S A M  
 1751 CGGCGCGCAA GCGAGCGTGT GCGCCGGAGC ACAATTGATA CTGATTTACG  
 GCCGCGCGTT CGCTCGCACCA CGCGGCCTCG TGTAACTAT GACTAAATGC  
 ~~~~~  
 ie-0 pr
 1801 AGTTGGGCAA ACGGGCTTTA TATAGCCTGT CCCCTCCACA GCCCTAGTGC
 TCAACCCGTT TGCCCGAAAT ATATCGGACA GGGGAGGTGT CGGGATCACG
 ~~~~~  
 ie-0 pr  
 1851 CGTGCAGCAA GTGCCTACGT GACCAGGCTC TCCTACGCAT ATACAATCTT  
 GCACGCGTTT CACGGATGCA CTGGTCCGAG AGGATGCGTA TATGTTAGAA  
 ~~~~~  
 ie-0 pr
 1901 ATCTCTATAG ATAAGGTTTC CATATATAAA GCCTCTCGAT GGCTGAACGT
 TAGAGATATC TATTCCAAAG GTATATATT CGGAGAGCTA CCGACTTGCA
 ~~~~~  
 ie-0 pr  
 1951 GCACAGTATC GTGTTGATTT CTGAGTGCTA ACTAACAGTT ACAATGAACC  
 CGTGTCTAG CACAACCTAAA GACTCACGAT TGATTGTCAA TGTTACTTGG  
 ~~~~~  
 ie-0 pr
 2001 GTTTTTTCG AGAGAATAAC ATTTTGACG CGCCAAGGAC CGGGGGCAAG
 CAAAAAAAGC TCTCTTATTG TAAAAACTGC CGGGTTCCCTG GCCCCCCGTT
 ~~~~~  
 ie-0 pr

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

2051 GGTCGTGCCA AATCTTGCC AGCGCCTGCC GCCAACTCGC CGCCGTCGCC  
CCAGCACGGT TTAGAACGG TCGCGGACGG CGGTTGAGCG GCGGCAGCGG  
~~~~~  
ie-0 pr

2101 TGTTCGTCCG CCGCCAAAAT CTAACATCAA ACCACCTACG CGCATCTCTC
ACAAGCAGGC GGCGGTTTA GATTGTAGTT TGGTGGATGC GCGTAGAGAG
~~~~~  
ie-0 pr

2151 CGCCTAAACA GCCTATGTGC ACCTCTCCGG CCAAGCCGTT GGAGCACAGC  
GCGGATTGT CGGATACACG TGGAGAGGCC GTTCCGGCAA CCTCGTGTG  
~~~~~  
ie-0 pr

2201 AGCATTGTAA GTAAAAAACC AGTCGTCAAC AGAAAAGATG GATATTTGT
TCGTAACATT CATTTTTGG TCAGCAGTTG TCTTTTCTAC CTATAAAACA
~~~~~  
ie-0 pr

2251 GCCGCCGAG TTTGGGAACA AGTTGAAGG TTTGCCGCG TACAGCGACA  
CGGCGGGCTC AAACCCTTGT TCAAACCTCC AACACGGCGC ATGTCGCTGT  
~~~~~  
ie-0 pr
p10 pr
~~

2301 AACTGGATT CAAACAAGAG CGCGATCTAC GTACCTGCAG GCCCGGGCTC
TTGACCTAAA GTTTGTTCTC GCGCTAGATG CATGGACGTC CGGGCCCGAG
~~~~~  
ie-0 pr  
p10 pr  
~~~~~

2351 AACCCAACAC AATATATTAT AGTTAATAA GAATTATTAT CAAATCATT
TTGGGTTGTG TTATATAATA TCAATTATT CTTAATAATA GTTAGTAA
p10 pr
~~~~~

2401 GTATATTAAT TAAAATACTA TACTGTAAAT TACATTTAT TTACAATTCA  
CATATAATTAA ATTATTATGAT ATGACATTAA ATGTAAAATA AATGTTAAGT  
lacZ  
~~~~~

M T M I T D S L A V V L Q R R .
2451 CTCTAGAATG ACCATGATTA CGGATTCACT GGCGTCGTT TTACAACGTC
GAGATCTTAC TGGTACTAAT GCCTAAGTGA CCGGCAGCAA AATGTTGCAG
lacZ
~~~~~  
· D W E N P G V T Q L N R L A A H

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

2501 GTGACTGGGA AAACCCTGGC GTTACCCAAC TTAATGCCT TGCAAGCACAT  
CACTGACCCCT TTTGGGACCG CAATGGGTTG AATTAGCGGA ACGTCTGTGA  
lacZ

-----  
P P F A S W R N S E E A R T D R P  
2551 CCCCCCTTCG CCAGCTGGCG TAATAGCGAA GAGGCCCGCA CCGATCGCCC  
GGGGGAAAGC GGTCGACCGC ATTATCGCTT CTCCGGCGT GGCTAGCGGG  
lacZ

-----  
S Q Q L R S L N G E W R F A W F P  
2601 TTCCCAACAG TTGCGCAGCC TGAATGGCGA ATGGCGCTTT GCCTGGTTTC  
AAGGGTTGTC AACCGTCGG ACTTACCGCT TACCGCGAAA CGGACCAAAG  
lacZ

-----  
Bsu36I  
-----  
A P E A V P E S W L E C D L P E  
2651 CGGCACCCAGA AGCGGTGCCG GAAAGCTGGC TGGAGTGCAG TCTTCCTGAG  
GCCGTGGTCT TCGCCACGGC CTTTCGACCG ACCTCACGCT AGAAGGACTC  
lacZ

-----  
Bsu36I  
~  
A D T V V V P S N W Q M H G Y D A  
2701 GCCGATACTG TCGTCGTCCC CTCAAACCTGG CAGATGCACG GTTACGATGC  
CGGCTATGAC AGCAGCAGGG GAGTTTGACC GTCTACGTGC CAATGCTACG  
lacZ

-----  
P I Y T N V T Y P I T V N P P F V  
2751 GCCCATCTAC ACCAACGTAAC CCTATCCCCT TACGGTCAAT CCGCCGTTTG  
CGGGTAGATG TGGTTGCATT GGATAGGGTA ATGCCAGTTA GGCAGCAAAC  
lacZ

-----  
P T E N P T G C Y S L T F N V D  
2801 TTCCCACCGA GAATCCGACG GGTTGTTACT CGCTCACATT TAATGTTGAT  
AAGGGTGCCT CTTAGGCTGC CCAACAATGA GCGAGTGTAA ATTACAACTA  
lacZ

-----  
E S W L Q E G Q T R I I F D G V N  
2851 GAAAGCTGGC TACAGGAAGG CCAGACGCGA ATTATTTTG ATGGCGTTAA  
CTTCGACCG ATGTCCTTCC GGTCTGCGCT TAATAAAAAC TACCGCAATT  
lacZ

-----  
S A F H L W C N G R W V G Y G Q D

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

2901 CTCGGCGTTT CATCTGTGGT GCAACGGGCG CTGGGTCGGT TACGGCCAGG  
GAGCCGAAA GTAGACACCA CGTTGCCCGC GACCCAGCCA ATGCCGGTCC  
lacZ

---

2951 · S R L P S E F D L S A F L R A G  
ACAGTCGTTT GCCGTCTGAA TTTGACCTGA GGCATTTTG ACGCGCCGGA  
TGTCAAGCAA CGGCAGACTT AAACCTGGACT CGCGTAAAAA TGCGCGGCCT  
lacZ

---

3001 E N R L A V M V L R W S D G S Y L ·  
GAAAACCGCC TCGCGGTGAT GGTGCTGCGT TGGAGTGACG GCAGTTATCT  
CTTTGGCGG AGCGCCACTA CCACGACCGCA ACCTCACTGC CGTCAATAGA  
lacZ

---

3051 · E D Q D M W R M S G I F R D V S L ·  
GGAAGATCAG GATATGTGGC GGATGAGCGG CATTTCGGT GACGTCTCGT  
CCTTCTAGTC CTATAACACCG CCTACTCGCC GTAAAAGGCA CTGCAGAGCA  
lacZ

---

3101 · L H K P T T Q I S D F H V A T R  
TGCTGCATAA ACCGACTACA CAAATCAGCG ATTTCATGT TGCCACTCGC  
ACGACGTATT TGGCTGATGT GTTTAGTCGC TAAAGGTACA ACGGTGAGCG  
lacZ

---

3151 F N D D F S R A V L E A E V Q M C ·  
TTTAATGATG ATTTCAAGCCG CGCTGTACTG GAGGCTGAAG TTCAGATGTG  
AAATTACTAC TAAAGTCGGC GCGACATGAC CTCCGACTTC AAGTCTACAC  
lacZ

---

3201 · G E L R D Y L R V T V S L W Q G E ·  
CGGCGAGTTG CGTGACTACC TACGGGTAAC AGTTTCTTTA TGGCAGGGTG  
GCCGCTAAC GCACTGATGG ATGCCCATTG TCAAAGAAAT ACCGTCCCAC  
lacZ

---

3251 · T Q V A S G T A P F G G E I I D  
AAACGCAGGT CGCCAGCGGC ACCGCGCCCT TCGGCGGTGA AATTATCGAT  
TTTGCCTCCA GCGGTCGCCG TGGCGCGGAA AGCCGCCACT TTAATAGCTA  
lacZ

---

3301 E R G G Y A D R V T L R L N V E N ·  
GAGCGTGGTG GTTATGCCGA TCGCGTCACA CTACGTCTGA ACGTCGAAAA  
CTCGCACAC CAATACGGCT AGCGCAGTGT GATGCAGACT TGCAGCTTT  
lacZ

---

· P K L W S A E I P N L Y R A V V E ·

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

3351 CCCGAAACTG TGGAGCGCCG AAATCCGAA TCTCTATCGT GCGGTGGTTG  
GGGCTTGAC ACCTCGCGC TTTAGGGCTT AGAGATAGCA CGCCACCAAC  
lacZ

-----  
• L H T A D G T L I E A E A C D V  
3401 AACTGCACAC CGCCGACGGC ACGCTGATTG AAGCAGAAGC CTGCGATGTC  
TTGACGTGTG CGGGCTGCCG TGCGACTAAC TTCGTCTTCG GACGCTACAG  
lacZ

-----  
G F R E V R I E N G L L L L N G K •  
3451 GGTTTCCGCG AGGTGCAGGAT TGAAAATGGT CTGCTGCTGC TGAACGGCAA  
CCAAAGGCGC TCCACGCCTA ACTTTACCA GACGACGACG ACTTGCCGTT  
lacZ

-----  
• P L L I R G V N R H E H H P L H G •  
3501 GCCGTTGCTG ATTGAGGCG TTAAACCGTCA CGAGCATCAT CCTCTGCATG  
CGGCAACGAC TAAGCTCCGC AATTGGCAGT GCTCGTAGTA GGAGACGTAC  
lacZ

-----  
• Q V M D E Q T M V Q D I L L M K  
3551 GTCAGGTACAT GGATGAGCAG ACGATGGTGC AGGATATCCT GCTGATGAAG  
CAGTCCAGTA CCTACTCGTC TGCTACCACG TCCTATAGGA CGACTACTTC  
lacZ

-----  
Q N N F N A V R C S H Y P N H P L •  
3601 CAGAACAACT TTAACGCCGT GCGCTGTTCG CATTATCCGA ACCATCCGCT  
GTCTTGTGA AATTGCGGCA CGCGACAAGC GTAATAGGCT TGGTAGGCGA  
lacZ

-----  
• W Y T L C D R Y G L Y V V D E A N •  
3651 GTGGTACACG CTGTGCGACC GCTACGGCCT GTATGTGGTG GATGAAGCCA  
CACCATGTGC GACACGCTGG CGATGCCGA CATACACCAC CTACTCGGT  
lacZ

-----  
• I E T H G M V P M N R L T D D P  
3701 ATATTGAAAC CCACGGCATG GTGCCAATGA ATCGTCTGAC CGATGATCCG  
TATAACTTG GGTGCCGTAC CACGGTTACT TAGCAGACTG GCTACTAGGC  
lacZ

-----  
R W L P A M S E R V T R M V Q R D •  
3751 CGCTGGCTAC CGGCGATGAG CGAACCGCTA ACGCGAATGG TGCAGCGCGA  
GCGACCGATG GCCGCTACTC GCTTGCCTAC TGCCTTACCG ACGTCGCGCT  
lacZ

-----  
• R N H P S V I I W S L G N E S G H •

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

|      |                                                                                                                                                                             |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3801 | TCGTAATCAC CCGAGTGTGA TCATCTGGTC GCTGGGAAT GAATCAGGCC<br>AGCATTAGTG GGCTCACACT AGTAGACCAG CGACCCCTTA CTTAGTCCGG<br>lacZ                                                     |
| 3851 | -----<br>· G A N H D A L Y R W I K S V D P<br>ACGGCGCTAA TCACGACGCG CTGTATCGCT GGATCAAATC TGTGATCCT<br>TGCCGCGATT AGTGCTGCGC GACATAGCGA CCTAGTTAG ACAGCTAGGA<br>lacZ        |
| 3901 | -----<br>S R P V Q Y E G G G A D T T A T D ·<br>TCCCGCCCGG TGCAGTATGA AGGCGGCGGA GCCGACACCA CGGCCACCGA<br>AGGGCGGGCC ACGTCATACT TCCGCCGCCT CGGCTGTGGT GCCGGTGGCT<br>lacZ    |
| 3951 | -----<br>· I I C P M Y A R V D E D Q P F P A ·<br>TATTATTTGC CCGATGTACG CGCGCGTGG A TGAAGACCAG CCCCTCCCGG<br>ATAATAAACG GGCTACATGC GCGCGCACCT ACTTCTGGTC GGGAAAGGCC<br>lacZ |
| 4001 | -----<br>· V P K W S I K K W L S L P G E T<br>CTGTGCCGAA ATGGTCCATC AAAAAATGGC TTTCGCTACC TGGAGAGACG<br>GACACGGCTT TACCAGGTAG TTTTTTACCG AAAGCGATGG ACCTCTCTGC<br>lacZ      |
| 4051 | -----<br>R P L I L C E Y A H A M G N S L G ·<br>CGCCCGCTGA CCCTTTGCGA ATACGCCAC GCGATGGGT A CAGTCTTGG<br>GCGGGCGACT AGGAAACGCT TATGCGGGTG CGCTACCCAT TGTAGAACCC<br>lacZ     |
| 4101 | -----<br>· G F A K Y W Q A F R Q Y P R L Q G ·<br>CGGTTTCGCT AAATACTGGC AGGCGTTTCG TCAGTATCCC CGTTTACAGG<br>GCCAAAGCGA TTTATGACCG TCCGAAAGC AGTCATAGGG GCAAATGTCC<br>lacZ   |
| 4151 | -----<br>· G F V W D W V D Q S L I K Y D E<br>GCGGCTTCGT CTGGGACTGG GTGGATCAGT CGCTGATTAA ATATGATGAA<br>CGCCGAAGCA GACCCTGACC CACCTAGTCA GCGACTAATT TATACTACTT<br>lacZ      |
| 4201 | -----<br>N G N P W S A Y G G D F G D T P N ·<br>AACGGCAACC CGTGGTCCGG TTACGGCGGT GATTTTGGCG ATACGCCGAA<br>TTGCCGTTGG GCACCAGCCG AATGCCGCCA CTAAAACCGC TATGCCGCTT<br>lacZ    |
|      | -----<br>· D R Q F C M N G L V F A D R T P H ·                                                                                                                              |

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

4251 CGATGCCAG TTCTGTATGA ACGGTCTGGT CTTTGCCGAC CGCACGCCGC  
GCTAGCGGTC AAGACATACT TGCCAGACCA GAAACGGCTG GCGTGCAGCG  
lacZ  
~~~~~  
· P A L T E A K H Q Q Q F F Q F R ·
4301 ATCCAGCGCT GACGGAAGCA AAACACCAGC AGCAGTTTT CCAGTTCCGT
TAGGTCGCGA CTGCCTTCGT TTTGTGGTCG TCGTCAAAAA GGTCAAGGCA
lacZ
~~~~~  
L S G Q T I E V T S E Y L F R H S ·  
4351 TTATCCGGGC AAACCATCGA AGTGACCAGC GAATACCTGT TCCGTCTAG  
AATAGGCCCG TTTGGTAGCT TCACGGTCG CTTATGGACA AGGCAGTATC  
lacZ  
~~~~~  
· D N E L L H W M V A L D G K P L A ·
4401 CGATAACGAG CTCCTGCACT GGATGGTGGC GCTGGATGGT AAGCCGCTGG
GCTATTGCTC GAGGACGTGA CCTACCACCG CGACCTACCA TTCGGCGACC
lacZ
~~~~~  
· S G E V P L D V A P Q G K Q L I ·  
4451 CAAGCGGTGA AGTGCCTCTG GATGTCGCTC CACAAGGTA ACAGTTGATT  
GTTCGCCACT TCACGGAGAC CTACAGCGAG GTGTTCCATT TGTCAACTAA  
lacZ  
~~~~~  
E L P E L P Q P E S A G Q L W L T ·
4501 GAACTGCCTG AACTACCGCA GCCGGAGAGC GCCGGGCAAC TCTGGCTCAC
CTTGACGGAC TTGATGGCGT CGGCCTCTCG CGGCCCGTTG AGACCGAGTG
lacZ
~~~~~  
· V R V V Q P N A T A W S E A G H I ·  
4551 AGTACCGCGTA GTGCAACCGA ACGCGACCGC ATGGTCAGAA GCCGGGCACA  
TCATGCGCAT CACGTTGGCT TGCGCTGGCG TACCAAGTCTT CGGCCCGTGT  
lacZ  
~~~~~  
· S A W Q Q W R L A E N L S V T L ·
4601 TCAGCGCCTG GCAGCGAGTGG CGTCTGGCGG AAAACCTCAG TGTGACGCTC
AGTCGCGGAC CGTCGTCACC GCAGACCGCC TTTTGGAGTC ACACTGCGAG
lacZ
~~~~~  
P A A S H A I P H L T T S E M D F ·  
4651 CCCGCCCGT CCCACGCCAT CCCGCATCTG ACCACCAGCG AAATGGATT  
GGGCAGCGCA GGGTGCAGTA GGGCGTAGAC TGGTGGTCGC TTTACCTAAA  
lacZ  
~~~~~  
· C I E L G N K R W Q F N R Q S G F ·

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

4701 TTGCATCGAG CTGGGTAATA AGCGTTGGCA ATTTAACCGC CAGTCAGGCT
AACGTAGCTC GACCCATTAT TCGCAACCGT TAAATTGGCG GTCAGTCCGA
lacZ
~~~~~  
· L S Q M W I G D K K Q L L T P L  
4751 TTCTTTCACA GATGTGGATT GGCGATAAAA ACAACTGCT GACGCCGCTG  
AAGAAAGTGT CTACACCTAA CCGCTATTCTT TTGTTGACGA CTGCGGCGAC  
lacZ  
~~~~~  
R D Q F T R A P L D N D I G V S E ·
4801 CGCGATCAGT TCACCCGTGC ACCGCTGGAT AACGACATTG GCGTAAGTGA
GCGCTAGTCA AGTGGGCACG TGGCGACCTA TTGCTGTAAC CGCATTCACT
lacZ
~~~~~  
· A T R I D P N A W V E R W K A A G ·  
4851 AGCGACCCGC ATTGACCCTA ACGCCTGGGT CGAACGCTGG AAGGCAGCG  
TCGCTGGCG TAACTGGGAT TGCGGACCCA GCTTGCACCC TTCCGCCGCC  
lacZ  
~~~~~  
· H Y Q A E A A L L Q C T A D T L
4901 GCCATTACCA GGCGAAGCA GCGTTGTTGC AGTGCACGGC AGATACACTT
CGGTAATGGT CCGGCTTCGT CGCAACAACG TCACGTGCCG TCTATGTGAA
lacZ
~~~~~  
A D A V L I T T A H A W Q H Q G K ·  
4951 GCTGATGCGG TGCTGATTAC GACCGCTCAC GCGTGGCAGC ATCAGGGGAA  
CGACTACGCC ACGACTAATG CTGGCGAGTG CGCACCGTCG TAGTCCCCTT  
lacZ  
~~~~~  
· T L F I S R K T Y R I D G S G Q M ·
5001 AACCTTATTT ATCAGCCGGA AAACCTACCG GATTGATGGT AGTGGTCAA
TTGGAATAAA TAGTCGGCCT TTTGGATGGC CTAACCTACCA TCACCAAGTTT
lacZ
~~~~~  
· A I T V D V E V A S D T P H P A  
5051 TGGCGATTAC CGTTGATGTT GAAGTGGCGA GCGATACACC GCATCCGGCG  
ACCGCTAATG GCAACTACAA CTTCACCGCT CGCTATGTGG CGTAGGCCGC  
lacZ  
~~~~~  
R I G L N C Q L A Q V A E R V N W ·
5101 CGGATTGGCC TGAACCTGCCA GCTGGCGCAG GTAGCAGAGC GGGTAAACTG
GCCTAACCGG ACTTGACGGT CGACCGCGTC CATCGTCTCG CCCATTGAC
lacZ
~~~~~  
· L G L G P Q E N Y P D R L T A A C ·

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

|       |                                                                                                                                                                  |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5151  | GCTCGGATTA GGGCCGCAAG AAAACTATCC CGACCGCCTT ACTGCCGCCT<br>CGAGCCTAAT CCCGGCGTTC TTTTGATAGG GCTGGCGGAA TGACGGCGGA<br>lacZ                                         |
| <hr/> |                                                                                                                                                                  |
| 5201  | · F D R W D L P L S D M Y T P Y V<br>GTTTGACCG CTGGGATCTG CCATTGTCAG ACATGTATAAC CCCGTACGTC<br>CAAAACTGGC GACCCTAGAC GGTAACAGTC TGTACATATG GGGCATGCAG<br>lacZ    |
| <hr/> |                                                                                                                                                                  |
| 5251  | F P S E N G L R C G T R E L N Y G ·<br>TTCCCGAGCG AAAACGGTCT GCGCTGCCGG ACCGCGGAAT TGAATTATGG<br>AAGGGCTCGC TTTGCCAGA CGCGACGCC CGCGCGCTTA ACTTAATACC<br>lacZ    |
| <hr/> |                                                                                                                                                                  |
| 5301  | · P H Q W R G D F Q F N I S R Y S Q ·<br>CCCACACCAG TGGCGCGCG ACTTCCAGTT CAACATCAGC CGCTACAGTC<br>GGGTGTGGTC ACCGCGCCGC TGAAGGTCAA GTTGTAGTCG GCGATGTCAG<br>lacZ |
| <hr/> |                                                                                                                                                                  |
| 5351  | · Q Q L M E T S H R H L L H A E E<br>AACAGCAACT GATGGAAACC AGCCATCGCC ATCTGCTGCA CGCGGAAGAA<br>TTGTCGTTGA CTACCTTGG TCGGTAGCGG TAGACGACGT GCGCCTTCTT<br>lacZ     |
| <hr/> |                                                                                                                                                                  |
| 5401  | G T W L N I D G F H M G I G G D D ·<br>GGCACATGGC TGAATATCGA CGGTTTCCAT ATGGGGATTG GTGGCGACGA<br>CCGTGTACCG ACTTATAGCT GCCAAAGGTA TACCCCTAAC CACCGCTGCT<br>lacZ  |
| <hr/> |                                                                                                                                                                  |
| 5451  | · S W S P S V S A E F Q L S A G R Y ·<br>CTCCTGGAGC CCGTCAGTAT CGGCGGAATT CCAGCTGAGC GCCGGTCGCT<br>GAGGACCTCG GGCAGTCATA GCCGCCTAA GGTCGACTCG CGGCCAGCGA<br>lacZ |
| <hr/> |                                                                                                                                                                  |
| 5501  | · H Y Q L V W C Q K<br>ACCATTACCA GTTGGTCTGG TGTAAAAAT AATGACTGCA GGTCGACCAT<br>TGGTAATGGT CAACCAGACC ACAGTTTTA TTACTGACGT CCAGCTGGTA<br>AttR2                   |
| <hr/> |                                                                                                                                                                  |
| 5551  | AGTGACTGGA TATGTTGTGT TTTACAGTAT TATGTAGTCT GTTTTTATG<br>TCACTGACCT ATACAACACA AAATGTCATA ATACATCAGA CAAAAAATAC<br>AttR2                                         |
| <hr/> |                                                                                                                                                                  |

Table 14 (continued) Nucleotide sequence of the Mel/V5-His DEST cassette (SEQ ID NO: 94).

5601 CAAAATCTAA TTTAATATAT TGATATTTAT ATCATTAC GTTTCTCGTT  
GTTTAGATT AAATTATATA ACTATAAATA TAGTAAAATG CAAAGAGCAA  
AttR2 V5/His  
~~~~~  
G K P
5651 CAGCTTCCT GTACAAAGTG GTGAGAATGA ATGAAGATCT GGGGAAGCCT
GTCGAAAGAA CATGTTCAC CACTCTTACT TACTTCTAGA CCCCTTCGGA
V5/His
~~~~~  
I P N P L L G L D S T R T G H H H .  
5701 ATCCCTAACCTCTCCTCGG TCTCGATTCT ACGCGTACCG GTCATCATCA  
TAGGGATTGG GAGAGGAGCC AGAGCTAAGA TGCGCATGGC CAGTAGTAGT  
stop codon  
~~~  
V5/His
~~~~~  
. H H H  
5751 CCATCACCAT TGA  
GGTAGTGGTA ACT

Please amend Table 15 on pages 429 and 430 as follows:

Table 15: Baculoviral promoter sequences.

## AcMNPV ORF 25 promoter sequence (SEQ ID NO: 98)

### AcMNPV lef 3 promoter (SEQ ID NO: 99)

### AcMNPV TLP promoter (SEQ ID NO: 100)

Table 15 (continued) Baculoviral promoter sequences.

AcMNPV hr5 sequence (SEQ ID NO: 101)

GtttacgcgtagaattctacccgtaaagcgagtttagttatgagccatgtcaaaacatgacatcagctttatTTTataacaaatgacatcatt  
tctgattgtgtttacacgtagaattctactcgtaaaggcgagtcagttgaaaaacaaatgacatcatTTTgattgtgcTTacaagttagaat  
tctacccgtaaatcaagtctcgTTTgaaaaacaaatgagtcattgttatgatcatattgcaaacaatgactcatcaatcgatcgatcgat  
acgtagaattctactcgtaaaggcgagttatgagccgtgtcaaaacatgacatcatctcgattgaaaaacaaatgacatcatccactgatcg  
tgcgTTacaagttagaattctactcgtaaagccagTCGGTTatgagccgtgtcaaaacatgacatcagCTTatgactcgacttgattgttt  
acgcgtagaattctactcgtaaagc

Please amend Table 16 on page 431 as follows:

Table 16: IE-1 promoter, coding, and polypeptide sequence.

### AcMNPV IE-1 promoter (SEQ ID NO: 102)

GttttacgcgtagaattctacccgtaaagcgagtttagttatgagccatgtcaaaaacatgacatcagctttatTTTataacaAAatgacatcatt  
tcttgatttgttttacacgtagaattctactcgtaaaggcgagttcgatTTTaaaaacaaatgacatcatTTTgtattgtgcTTTacaagttagaat  
tctacccgtaaatcaagttcggtttaaaaacaaatgagtcatattgtatgatcatattgcaaaacaaatgactcatcaatcgatcgatcgatcg  
acgtagaattctactcgtaaaggcgagttatgagccgtgtgcaaaacatgacatcatctcgatTTTaaaaacaaatgacatcatccactgtatcg  
tgcgttacaagttagattctactcgtaaaggccagttcggttatgagccgtgtgcaaaacatgacatcagttatgactcgatcgatTTTaaaa  
acgcgtagaattctactcgtaaaggcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcg

## AcMPNV IE-1 coding sequence (SEQ ID NO: 103)

atgacgcgaaatttaacgcgtcgacaccagcgttcgacgccgtccggcgttcgacaacagctattcagagtttgtgataaaa  
caacccaaacgactatttaagtattataaccatcccaccccgatggagccgacacggtgatctgacagcgagactgcggcagctcaa  
acttttggcaagcgtaactcgtaactgataatgatttagtggatgtttgtcaagaccactgataatctcgaagaagcagtttgtctgttt  
attattcgaatcccttggcagcgttggagcaaccatcgcggcgttcgtatcatgcggaaatctttgagcattctgtgtgtgaac  
caaccatcgcaactggaactaaacggagctggacgaatactggacaattcacaagggtgtggccgagttacaaaaattaaattga  
ggcctaatacacaagaaaagcacaattcaaaactgtgtcaacccttgaacagacaattaatcacaacacgaacattgcacgtcgctcaact  
caagaaaattacgcattttactaattgtttgcggcgtatttaatgcgttgcacgacaacgactacaattccaaacagggtctccgaccatatgt  
ccgaaactggattacatgttggtaaaaaaagtgaagtgaagccgttggaaattatatttgcctaagtacgtgagcaatgtggttacgaat  
atacaaacaattattacatggtagataatcgcgttgcggtaactttgataaaaattagggttatgcgtacaatttggtaagaaaaccggc  
atagaaaattcctcatttcgaatgtgtcaacgacgacggcgtcacaattgtaaaaatgccattcgtcgatgtgcaccacacgttta  
aagctgctctgacttcataatttaatttagatgtattacgcgcaaccacattgtgacttttacaatcgttggcgaagaaaatgtgggtt  
tctttgagcaagttgtacgaaatgtatcaagataaaaattttacttgcctattatgcgttagtgcgtaaagagagataatgagactgcatt  
ctaataattttgtatcgcgtatgtgagtcataattaaagtattcggaaagtgtcagttccgacaatccccaaacaaatattgtgggg  
acaatttaatttaattgttaacaaaaaaagtacgctcacgtacaatcagcagcgtcgtatctttgttaataattataatcatgacaat  
attgcgagtaataataacgcagaaaaattttaaaaaggtaagaaggaggacggcgcgtcgtacatgcgtcaacagtatttgactcagaatgt  
agataatgtaaagggtcacaattttatgtattgtcttcaaaaacgaggagcgtactatagctaaagaaaacaaagagttattggatttc  
tggcgaattaaagatgttagacgttagtcaagtaattcaaaaatataatagatttaagcatcacatgttgcgtaaagtgtgaaccgaaga  
gagagcactacattgcacaataattgttaattgttagcttaatattacagggtctggtccgttgcacgtataacgttgcggaaacaa  
aaactaaattgttaatataaaaaattcgaatttaat

### AcMNPV IE-1 protein sequence (SEQ ID NO: 104)

Mtqinfnasytsastpsrasfdnsysefcdkqpndylsyynhptgdadtvisdsetaaasnflasvnsldndlveclkttdnleeavs  
sayysesleqpvpveqpspsayhaesfehsagvnqpsatgtkrkldeyldnsqvvqfnkiklrpkkykkstiqscatleqtinhntni  
ctvastqeithyftndfapylmrfdndynsnrfsdhmsetgyymfvvksevkpfelifakyvsnvyyeytnnyymvdnrfvvt  
fdkirfmisynlvketgieiphqsqdvcnldetaaqnckkchfvvhftkaaltsyfnldmyyaqttftvllqlsgerkgcgflsklyemy  
qdknlftlpimlsrkesneietasnnffvspyvsqilkysesvqfpdnppnkyvvdnlnlivnkksltkykyssvanllfnnykyhdnia  
snnnaenlkvvkkedgsmhiveeqyltnqvndvnkgahnfivlsfkneerltiakknefytisgeikdvdvsqviqkynrfkhmfvi  
gkvnrresttlhnllkllalilqglvplsdaiftfaeqklnckykkfefn

Please amend Table 17 on pages 432-434 as follows:

Table 17: Nucleotide sequence of plasmid pLenti6/V5-DEST (SEQ ID NO: 105).

AATGTAGTCTTATGCAATACTCTGTAGTCTGCAACATGGTAACGATGAGTTAGCAACATGCCTTACAA  
GGAGAGAAAAAGCACCCTGCATGCCGATTGGTGGAAACTAAGGTGGTACGATCGTCCTTATTAGGAAGGC  
AACAGACGGGTCTGACATGGATTGGACGAACCACTGAATTGCCCATGAGAGATATTGATTAAAGTG  
CCTAGCTCGATACATAAACGGGCTCTCTGGTAGACCAGATCTGAGCCTGGGAGCTCTGGCTAACTA  
GGGAACCCACTGCTTAAGCCTAATAAGCTGCCCTGAGTGCTCAAGTAGTGTGCCCCGCTGTTGT  
GTGACTCTGGTAACTAGAGATCCCTCAGACCTTTAGTCAGTGTGAAAATCTCTAGCAGTGGCGCCCG  
AACAGGGACTTGAAGCGAAAGGGAAACCAAGAGGAGCTCTCGACGCGAGACTCGGCTGCTGAAGCGC  
GCACGGCAAGAGGCAGGGGGCGGCGACTGGTAGTGAGTACGCCAAAATTTGACTAGCGGAGGCTAGAAGGA  
GAGAGATGGGTGCGAGAGCGTCAGTATTAAAGGGGAGAATTAGATCGGATGGAAAAAAATTGGTTA  
AGGCCAGGGGAAAGAAAAATATAAATTAAACATATAGTATGGCAAGCAGGGAGCTAGAACGATTG  
CAGTTAATCTGGCTGTTAGAACATCAGAAGGCTGAGACAATACTGGGACAGCTACAACCATCCCT  
TCAGACAGGATCAGAAGAACTTAGATCATTATAATAACAGTAGCAACCCCTCTATTGTGTCATCAAAGG  
ATAGAGATAAAAGACACCAAGGAAGCTTACAGAACAGATAGAGGAAGAGCAAAACAAAAGTAAGACCACCG  
CACAGCAAGCGGCCGCTGATCTTCAGACCTGGAGGGAGATATGAGGGACAATTGGAGAAGTGAATTAT  
ATAAAATATAAAGTAGTAAAAATTGAACCATTAGGAGTAGCACCCACCAAGGCAAAGAGAAGAGTGGTGCA  
GAGAGAAAAAAAGAGCAGTGGGAATAGGAGCTTGTCCCTGGGTTCTGGGAGCAGCAGGAAGCAGTATG  
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTGCAGCAGCAGAACA  
ATTGCTGGGGCTATTGAGGCACAGCATTGTTGCAACTCACAGTCTGGGACATCAAGCAGCTCCA  
GCGAAGAACCTGGCTGTTAGAACATCTAAAGGATCAACAGCTCTGGGATTGGGTTGCTCTGG  
AAACTCATTCGACCACTGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTGCAGCAGCAGAACA  
ATCACACGACCTGGATGGAGTGGGACAGAGAAATTAAACATTACACAAGCTTAATACACTCCTTAATTGA  
AGAATCGAAAACCAGCAAGAAAAGAATGAACAAGAATTATTGAAATTAGATAATGGCAAGTTGTGG  
AATTGGTTAACATAACAAATTGGCTGTTAGAACATCTAAAGGATCAACAGCTCTGGGATTGGGTTGCTCTGG  
GTTTAAGAATAGTTTGCTGTACTTTCTATAGTGAATAGAGTTAGGAGGGATATTCAACGTTACATTGTT  
TCAGACCCACCTCCAACCCCGAGGGGACCCGACAGGCCAGGAAGGAATAGAAGAAGAAGGTGGAGAGA  
GACAGAGACAGATCCATTGATTAGTGAACGGATCTGACGGTATCGATAAGCTGGAGTTCCGCGTTA  
CATAACTTACGGTAATGGCCGCTGGCTGACGCCAACGACCCCCGCCATTGACGTCAATAATGAC  
GTATGTTCCCATAGTAACGCCAACAGGACTTTCCATTGACGTCAATGGTGGAGTATTACGGTAAACT  
GCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCTATTGACGTCAATGACGGTAAAT  
GGCCCGCCTGGCATTATGCCAGTACATGACCTTATGGACTTCCATTGGCAGTACATCTACGTATT  
AGTCATCGCTATTACCATGGTGTGGCTTGGCAGTACATCAATGGCGTGGATAGCGGTTGACTCA  
CGGGGATTTCAGTCTCCACCCATTGACGTCAATGGAGTTGTTGGCACCAAAATCAACCGGACT  
TTCCAAAATGCGTAACAACTCCGCCATTGACGCAAATGGCGTAGGGGTACGGTGTACGGTGGAGGTCTA  
TATAAGCAGAGCTCGTTAGTGAACCGTCAGATGCCCTGGAGACGCCATTGGCTGTTTGACCTCCAT  
AGAAGACACCGACTCTAGAGGATCCACTAGTCCAGTGTGGAGTATTCTGAGATATCAACAAGTTGTA  
CAAAAAGCTGAACGAGAACGTAATGATATAAATCAATATATTAAATTAGATTGCTATAAAAAAA  
CAGACTACATAATACTGTAACACAAACATATCCAGTCACTATGGCGGCCATTAGGCACCCAGGCTT  
TACACTTTATGCTTCCGGCTCGTATAATGTGTGGATTGGAGTTAGGATCCGGCGAGATTTCAGGAGCT  
AAGGAAGCTAAAATGGGAGAAAAAAATCACTGGGATATACCACCGTTGATATATCCCAATGGCATCGTAAAG  
AACATTGGAGGCAATTGCTGAGTGTACCTATAACCAGACCGTTGAGTGGGATATTACGGC  
CTTTTAAAGACCGTAAGAAAAATAAGCACAAGTTTATCCGGCTTATTACATCTTGCCTCGCTG  
ATGAATGCTCATCCGAATTCCGTATGGCAATGAAAGACGGTGAGCTGGTATATGGGATAGTGGTCA  
CTTGTACACCGTTTCCATGAGCAAACGTTGATCGCTCTGGAGTGAATACCACGACGATT  
CCGGCAGTTCTACACATATTCGCAAGATGTGGCGTTACGGTGAACACCTGGCTATTCCCTAAA  
GGTTTATTGAGAATATGTTTCTCAGCCAATCCCTGGGTGAGTTTACCAAGTTGATTAAACG  
TGGCCAATATGGACAACCTTCTCGCCCCGTTTACCATGGGAAATATTATACGCAAGGCAGAACAGG  
GCTGATGCCGCTGGCGATTCAAGGTTGATCGCTGAGTGGCTTCCATGTCGGAGAATGCTTAAT  
GAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGCTAAAGATCTGGATCCGGCTTACTAAAGCCA  
GATAACAGTATGCGTATTGCGCGCTGATTGGCGGTATAAGAATATACTGATATGTATAACCGAAG  
TATGTCAAAAGAGGTGTGCTATGAAGCAGCGTATTACAGTGACAGTTGACAGCGACAGCTACGTTGC  
TCAAGGCATATATGATGTCAATATCTCCGGCTGGTAGCACAACCATGCGAGAATGAAGGCCGCTGCTG  
CGTGCAGCAGCTGGAAAGCGGAAATCAGGAAGGGATGGCTGAGGTGCCCCGGTTATTGAAATGAACG  
GCTCTTTGCTGACGAGAACAGGGACTGGTGAATGCAGTTAACCTATAAAAGAGAGAGGCC

Table 17 (continued) Nucleotide sequence of plasmid pLenti6/V5-DEST (SEQ ID NO: 105).

GTTATCGCTGTTGTGGATGTACAGAGTGATATTATTGACACGCCCGGGCGACGGATGGTATCCCCCT  
GGCCAGTGCACGCTGCTGTCAGATAAAGTCTCCGTGAACCTTACCCGGTGGTCATATCGGGATGAA  
AGCTGGCGCATGATGACCACCGATATGGCCAGTGTGCCGGTCTCCGTTATCGGGAAAGAAGTGGCTGATC  
TCAGCCACCGCGAAAATGACATCAAAACGCCATTAACCTGATGTTCTGGGAATATAATGTCAGGCTC  
CGTTATACACAGCCAGTCTGCAGGTGACCATACTGACTGGATATGTTGTTTACAGTATTATGTAGT  
CTGTTTTTATGAAAATCTAATTAAATATTGATATTATCATTACGTTCTCGTTAGCTTC  
TTGTACAAAGTGGTTGATATCCAGCACAGTGGCGGCCGCTCGAGTCTAGAGGGCCCGGGTCAAGGTA  
AGCCTATCCCTAACCCCTCTCGTCTCGATTCTACCGTACCGTTAGTAATGAGTTGGAATTAAATT  
CTGTGGAATGTGTGTCAGTTAGGGTGTGAAAGTCCCCAGGCTCCCAGGCAAGTATGCAAAGC  
ATGCATCTCAATTAGTCAGCAACCAGGTGTGAAAGTCCCCAGGCTCCCCAGCAGGCAAGTATGCAA  
GCATGCATCTCAATTAGTCAGCAACCATACTCCGCCCTAACCTCCGCCATCCGCCCTAACCTCCGCC  
CAGTTCCGCCCTTCGCCCATGGCTGACTAATTTTTATTGAGAGGCCAGGCGAGGCGCTCT  
GCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTGAGGCCCTAGGTTTGCAAAAAGCTCCGG  
GAGCTTGTATATCCATTTCGGATCTGATCAGCACGTGTTGACAATTATCATCGGATAGTATATCGC  
ATAGTATAATACGACAAGGTGAGGAACATAACCATGGCCAAGCCTTGTCTCAAGAAGAATCCACCCCTCA  
TTGAAAGAGCAACGGCTACAATCAACAGCATCCCATCTCTGAAGACTACAGCGTCGCCAGCGCAGCTCT  
CTCTAGCGACGGCCGCATCTTCACTGGTGTCAATGTATATCATTTACTGGGGACCTTGTGCAGAACTC  
GTGGTGTGGCACTGCTGCTGCGGAGCTGGCACCTGACTTGTATCGTCGCGATCGGAAATGAGA  
ACAGGGGCATCTTGAGCCCTGCGGACGGTGCGCACAGGTGCTCTCGATCTGCATCTGGGATCAAAGC  
CATAGTGAAGGACAGTGTGGACAGCCGACGGCAGTGGGATTGCTGAATTGCTGCCCTCTGGTTATGTG  
TGGGAGGGCTAACGACAATTGAGCTCGGTACCTTTAACGACAATGACTTACAAGGAGCTGTAGATCTT  
AGCCACTTTAAAAGAAAAGGGGGACTTGAAGGGTAATTCACTCCAACGAAGACAAGATCTGCTTT  
TTGCTTGTACTGGGTCTCTGGTTAGACCAAGATCTGAGCCTGGAGCTCTGGCTAACTAGGAAACCC  
ACTGCTTAAGCCTCAATAAAGCTTGCCTGAGTGCTTCAAGTAGTGTTGCCCCGTCTGGTGTGACTCT  
GGTAACTAGAGATCCCTCAGACCCCTTTAGTCAGTGAGGAAATCTCTAGCAGTAGTAGTTCATGTCATC  
TTATTATTCACTTATAACTGCAAAGAAAATGAATATCAGAGAGTGAGAGGAAACTGTTTATTGCA  
TTATAATGGTTACAAATAAGCAATAGCATCACAAATTCAAAATAAGCATTTTCACTGCATTCT  
AGTTGTGGTTGTCCAAACTCATCAATGTATCTTATCATGTCGGCTCTAGCTATCCGCCCTAACCTCC  
GCCCATCCGCCCTAACCTCCGCCAGTCCGCCATTCTCCGCCCATGGCTGACTAACCTTTTATT  
TATGCAAGAGGCCAGGCCGCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTGAGGCC  
TAGGGACGTACCCAAATTGCCCTATAGTGAGTCGATTACGCGCCTACTGGCGTCGTTTACAACGT  
CGTACTGGGAAACCCCTGGCGTACCCAACTTAATCGCTTGAGCACATCCCTTCTGCCAGCTGGC  
GTAATAGCGAAGAGGCCGACCCGATGCCCTTCCAAACAGTTGCGCAGCCTGAATGGCAATGGACGC  
GCCCTGTAGCGCGCATTAGCGCGGGTGTGGTTACGCGCAGCGTGAACCGCTACACTGCCAGC  
GCCCTAGCGCCGCTCTTCGCTTCTCCCTTCTGCCACGTTGCCGGCTTCCCGTCAAG  
CTCTAAATGGGGCTCCCTTAGGGTCCGATTTAGTGCTTACGGCACCTCGACCCAAAAACTTGA  
TTAGGGTGTGGTACGTAGGGCCATGCCCTGATAGACGTTTCCGCTTACGTTGAGTCC  
ACGTTCTTAATAGTGGACTCTGTTCAAACACTGAAACAACACTCAACCCATTCTGGCTTATTCTT  
ATTATAAGGGATTTGCCGATTGCCCTATTGGTAAAAAATGAGCTGATTAACAAAATTAAACGC  
GAATTAAACAAATATTAACGCTTACAATTAGTGCGACTTTCGGGAAATGTGCGCGAACCCCTA  
TTGTTTATTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCTGATAATGCTTCA  
ATAATATTGAAAAGGAAGAGTATGAGTATTCAACATTCCGTCGCCCTATTCCCTTTGCC  
TTTGCTTCTCTGCTTGTGCTACCCAGAACGCTGGTAAAGTAAAGATGCTGAAGATCAGTGGTG  
CACGAGTGGGTTACATCGAAGTGGATCTAACAGCGGTAAGATCCTTGAGAGGTTTCCGCCAGAACG  
TTTCCAATGATGAGCACTTTAAAGTTCTGCTATGTCGGCGGTATTATCCGCTATTGACGCCGGCAA  
GAGCAACTCGTCGCCGCATACACTATTCTCAGAATGACTGGTTGAGTACTCACCAGTCACAGAAAAGC  
ATCTTACGGATGGCATGACAGTAAGAGAATTATGAGTCAGTGTGCCATAACCATGAGTGATAACACTGCC  
CAACTTACTCTGACAACAGATGGAGGACCGAAGGGAGCTAACCGCTTTTGACAAACATGGGGATCAT  
GTAACTCGCCTTGATGTTGGGAAACCGGAGCTGAATGAAGCCATACCAACAGCACGAGCGTGAACACCACGA  
TGCCTGTAGCAATGGCAACAACGTTGCGCAAACATTAAACTGGCAACTACTACTCTAGCTTCCGGCA  
ACAATTAAAGACTGGATGGAGGCCGATAAAAGTTGAGGACCACTTCTGCGCTCGGCCCTCCGGCTGG  
TGGTTTATTGCTGATAAAATCTGGAGGCCGGTGAAGCTGGGGTCTCGCGGTATATTGCA  
ATGGTAAGCCCTCCGTATGAGTTATCTACACGACGGGGAGTCAGGCAACTATGGATGAACGAAATAG  
ACAGATCGCTGAGATAGGTGCTCACTGATTAAGCATTGTAACGTGAGACCAAGTTACTCATATATA

Table 17 (continued) Nucleotide sequence of plasmid pLenti6/V5-DEST (SEQ ID NO: 105).

CTTAGATTGATTTAAAACCTCATTTAATTAAAGGATCTAGGTGAAGATCCTTTGATAATCTCA  
TGACCAAAATCCCTAACGTGAGTTTCGTTCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATC  
TTCTTGAGATCCTTTCTGCGCGTAATCTGCTGCTGCAAACAAAAACCACCGCTACCAGCGGTG  
GTTTGTGCGGATCAAGAGCTACCAACTCTTTCCGAAGGTACTGGCTTCAGCAGAGCGCAGATAC  
CAAATACTGTTCTCTAGTGAGCCGTAGTTAGGCCACCACTCAAGAACCTCTGTAGCACCGCTACATA  
CCTCGCTCTGCTAACCTGTTACCGAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTTACCGGGTTGGAC  
TCAAGACGATAGTTACCGATAAGGCGCAGCGGTGGCTGAACGGGGGTTCTGACACAGCCCAGCT  
TGGAGCGAACGACCTACACCGAACCTGAGATACCTACAGCGTGAGCTATGAGAAAGGCCACGCTCCCGA  
AGGGAGAAAGGCGGACAGGTATCCGGAAGCGGCAGGGTCGGAACAGGAGAGCGCACGGAGCTTCCA  
GGGGGAAACGCCCTGGTATCTTATAGTCCTGTCGGTTGCCACCTCTGACTTGAGCGTCGATTTTGT  
GATGCTCGTCAGGGGGCGGAGCCTATGGAAAACGCCAGCAACCGGCCCTTTACGGTTCTGGCCTT  
TTGCTGGCCTTTGCTCACATGTTCTTCGTTATCCCTGATTCTGAGCTTACCGCCTTACCGCC  
TTTGAGTGAGCTGATAACCGCTGCCGCAGCCGAACGACCGAGCCAGCGAGTCAGTGAGCGAGGAAGCGG  
AAGAGCGCCAATACGCAAACCGCCTCTCCCGCGCTGGCCATTAAATGCAGCTGGCACGACAG  
GTTTCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTAAATGTGAGTTAGCTCACTCATTAGCACCC  
CAGGCTTACACTTATGCTCCGGCTCGTATGTTGAGCGGATAACAATTACACAG  
GAAACAGCTATGACCATGATTACGCCAACGCGCAATTAAACCTCACTAAAGGAACAAAGCTGGAGCT  
GCAAGCTT

Please amend Table 18 on pages 435 and 436 as follows:

Table 18: Nucleotide sequence of plasmid pLenti6/V5-D-TOPO™ (SEQ ID NO: 106).

AATGTAGTCTTATGCAATACTCTGTAGTCTTGCACATGGTAACGATGAGTTAGCAACATGCCCTAACAA  
GGAGAGAAAAAGCACCCTGCATGCCATTGGTGGAAAGTAAGGGTACGATCGCCCTTATTAGGAAGGGC  
AACAGACGGGCTTGACATGGATTGGACGAACCACTGAATTGCCGCATTGCAGAGATATTGTATTAAAGTG  
CCTAGCTCGATACATAACGGGCTCTCTGGTTAGACCACTGAATTGCCGCATTGCAGAGATATTGTATTAAAGTG  
GGGAACCCACTGCTTAAGCCTCAATAAAGCTTGCCTGAGTGCCTCAAGTAGTGTGCCCCCTGTTGT  
GTGACTCTGGTAACTAGAGATCCCTCAGACCCCTTTAGTCAGTGTGGAAAATCTCTAGCAGTGGCGCCCG  
AACAGGGACTTGAAAGCGAAAGGGAAACCAAGAGGAGCTCTCGACGCAGGACTCGGCTTGCTGAAGCGC  
GCACGGCAAGAGGGAGGGCGGCGACTGGTGAGTACGCCAAAATTTGACTAGCGGAGGCTAGAAGGA  
GAGAGATGGGTGCGAGAGCGTCAGTTAACGGGGGAGAATTAGATCGCGATGGGAAAAAATCGGTTA  
AGGCCAGGGGAAAGAAAAAATATAAATTAACATATAGTATGGCAAGCAGGGAGCTAGAACGATTG  
CAGTTAACCTGGCCTGTTAGAAACATCAGAAGGCTGTAGACAAATACTGGGACAGCTACAACCCTCC  
TCAGACAGGATCAGAAGAACCTAGATCATATATAAACAGTAGCAACCCCTTATTGTGTGCATCAAAGG  
ATAGAGATAAAAGACACCAAGGAAGCTTAGACAAGATAGAGGAAGAGCAAAACAAAAGTAAGACCACCG  
CACAGCAAGCGGCCGCTGATCTCAGACCTGGAGGAGGAGATATGGGACAATTGGAGAAGTGAATTAT  
ATAAAATATAAAGTAGTAAAATTGAAACATTAGGAGTAGCACCCACCAAGGAAAGAGAAGAGTGGTGCA  
GAGAGAAAAAGAGCAGTGGGAAATAGGAGCTTGTGCTTGGGTTCTGGGAGCAGCAGGAAGCACTATG  
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTCAGCAGCAGACA  
ATTGCTGAGGGCTATTGAGGCCAACAGCATCTGTGCAACTCACAGTCTGGGCACTCAAGCAGCTCCA  
GCCAAGAACCTGGCTGTGAAAGATACCTAAAGGATCAACAGCTCTGGGATTGGGTTGCTCTGGA  
AAACTCATTCGACCAACTGCTGTGCTTGAATGCTAGTTGGAGTAATAAATCTCTGGAACAGATTGGA  
ATCACACGACCTGGATGGAGTGGACAGAGAAATTAAACATTACACAAGCTTAATACACTCCTTAATTG  
AGAACATCGAAAACCAGCAAGAAAAGAATGAACAAGAATTATTGGAATTAGATAAAATGGCAAGTTGTGG  
AATTGGTTAACATAACAAATTGGCTGTGGTATATAAATTATTCAATGATAGTAGGAGGCTTGGTAG  
GTTAAGAACATGTTTGTACTTTCTATAGTGAATAGAGTTAGGCAGGGATATTACCAATTATCGTT  
TCAGACCCACCTCCAAACCCCGAGGGGACCCGACAGGCCAGGAATAGAAGAAGAGTGGAGAGAGA  
GACAGAGACAGATCCATTGATTAGTGAACGGATCTCGACGGTATCGATAAGCTTGGAGTTCCCGCTTA  
CATAACTTACGGTAAATGCCCGCTGGCTGACGCCAACGACCCCCCGCCATTGACGTCAATAATGAC  
GTATGTTCCCATACTGAACGCCAATAGGACTTCCATTGACGTCAATGGGTGGACTATTACGGTAAACT  
GCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCTATTGACGTCAATGACGGTAAAT  
GGCCCGCCTGGCATTATGCCAGTACATGACCTTATGGACTTCCATTGGCAGTACATCTACGTATT  
AGTCATCGCTATTACCATGGTGTGCGGTTTGGCAGTACATCAATGGCGTGGATAGCGGTTGACTCA  
CGGGGATTTCAGTCTCCACCCATTGACGTCAATGGAGTTGTTGGCACC AAAATCAACCGGACT  
TTCCAAAATGCGTAACAACACTCCGCCATTGACGCAAATGGCGTAGGGGTACGGTGGAGGTCTA  
TATAAGCAGAGCTCGTTAGTGAACCGTCAGATGCCCTGGAGACGCCATTACGCTGTTGACCTCC  
AGAACGACCCACTCTAGAGGATCCACTAGTCCAGTGTGGTGGAAATTGATCCCTTACCAAGGCTCGAG  
TCTAGAGGGCCCGGGTTCGAAGGTAAGCCTATCCCTAACCCCTCCCGTCTCGATTACCGCTACC  
GGTTAGTAATGAGTTGGAATTAAATTCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCGAGGCTC  
CCCAGGCAGGCAGAAGTATGCAAAGCATGCACTCTCAATTAGTCAGCAACCCAGGTGGAAAGTCCCGAGG  
CTCCCCAGCAGGCAGAAGTATGCAAAGCATGCACTCTCAATTAGTCAGCAACCATAGTCCGCCCTA  
CCGCCCATCCGCCCTAACCTCCGCCATTCTCGCCCATGGCTGACTAATTTTTTTA  
TTATGCGAGAGGCCAGGCCCTGCTGCTTGAGCTATTCCAGAAGTAGTGTGAGGAGGCTTTGGAGG  
CCTAGGCTTTGCAAAAAGCTCCGGAGCTGTATATCCATTTCGGATCTGATCACGTGTTGACA  
ATTATCATCGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAACCTAAACCATGGCCAAGCC  
TTGTCTCAAGAACGAACTCCACCCATTGAAAGAGCAACGGCTACAATCACAGCATCCCCATCTGAA  
GACTACAGCGTCGCCAGCGCAGCTCTCTAGCAGCGGCCATCTCAGTGTGTCATGTATATCATT  
TTACTGGGGACCTTGTGCGAGACTCGTGTGCTGGCACTGCTGCTGCGGCCAGCTGGCAACCTGAC  
TTGTATCGTCGCGATCGGAAATGAGAACAGGGGACTCTGAGGCCCTGCGACGGTGGCACAGGTGCTT  
CTCGATCTGCATCCTGGATCAAAGCCATAGTGAAGGACAGTGATGGACAGCCGACGGCAGTTGGGATT  
GTGAATTGCTGCCCTCTGGTTATGTGTGGAGGGCTAAGCACAATTGAGCTCGGTACCTTAAGACCAA  
TGACTTACAAGGCAGCTGTAGATCTTAGCCACTTTAAAAGAAAAGGGGGACTGGAAAGGCTAATTCA  
CTCCCAACGAAGACAAGATCTGCTTTGCTGTACTGGGTCTCTGGTTAGACCAGATCTGAGCCTGG  
GAGCTCTGGCTAAGGAAACCACTGCTTAAGCCTCAATAAGCTTGCCTTGAGTGTCAAGTAG

Table 18 (continued) Nucleotide sequence of plasmid pLenti6/V5-D-TOPO™  
(SEQ ID NO: 106).

TGTGTGCCGTCTGTTGTGACTCTGGTAACTAGAGATCCCTCAGACCCTTCTAGTCAGTGTGAAAAAT  
CTCTAGCAGTAGTAGTCATGTCACTTATTATTCACTGAAAGAAATGAATATCAGAG  
AGTGAGAGGAACCTGTTATTGCAGCTTATAATGGTTACAAATAAGCAATAGCATCACAAATTCAACAA  
ATAAAGCATTTTTCACTGCATTCTAGTTGTGGTTGCAAACACTCATCAATGTATCTTATCATGTCTG  
GCTCTAGCTATCCGCCCTAACCTCCGCCATCCGCCCTAACCTCCGCCAGTTCCGCCATTCTCCGC  
CCCATGGCTGACTAATTTTTATTATGAGGAGGCCGAGGCCCTCGGCCTTGAGCTATCCAGAA  
GTAGTGAGGAGGCTTTGGAGGCCCTAGGGACGTACCCAATTGCCCTATAGTGAGTCGTTACCGC  
GCTCACTGGCGTCGTTACAACGTCGTGACTGGAAAACCTGGCGTTACCCAACCTTAATGCCCTTG  
AGCACATCCCCCTTCGCCAGCTGGCGTAATAGCGAAGAGGCCGACCGATGCCCTCCAACAGTTG  
CGCAGCCTGAATGGCAATGGACGCGCCCTGTAGGGCGCATTAAGCGCCGGGTGTTACGC  
GCAGCGTACCGCTACACTGCCAGCGCCCTAGGCCGCTCCTTCGCTTCTCCCTCCTTC  
CACGTTGCCGGCTTCCCGTCAAGCTCTAAATCGGGGCTCCCTTAGGGTTCGATTAGTGCTTTA  
CGGCACCTCGACCCAAAAACTGATTAGGGTGTGGTACCGTAGTGGCCATGCCCTGATAGACGG  
TTTTGCCCTTGACGTTGGAGTCCACGTTAAATAGTGACTCTGTTCAAACGGAAACAACACT  
CAACCCCTATCTCGGTCTATTCTTGATTATAAGGGATTGCGCATTCGGCTATTGGTTAAAAAAT  
GAGCTGATTAACAAAAATTAAACGCAATTAAACAAATATTAAACGCTTACAATTAGGTGGCACTTT  
TCGGGGAAATGTGCGCGAACCCCTATTGTTATTCTAAATACATTAAATATGTATCCGCTCATG  
AGACAATAACCCGTATAATGCTCAATAATATTGAAAAGGAAGAGTATGAGTATTCAACATTCCGTG  
TCGCCCTATTCCCTTTGCGGCATTGCGCTTCTGCTCAGGAAACGCTGGTAAAGT  
AAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGTTACATCGAACTGGATCTAACAGCGGTAAGATC  
CTTGAGAGTTTCGCCCGAAGAACGTTCAATGATGAGCATTAAAGTTCTGCTATGTGGCGCG  
TATTATCCCGTATTGACGCCGGCAAGAGCAACTCGTCGCCGATACACTATTCTCAGAATGACTGGT  
TGAGTACTCACCAGTCACAGAAAAGCATCTACGGATGGCATGACAGTAAGAGAATTATGAGTC  
ATAACCATGAGTATAACACTGCCCAACTTACTCTGACAAACGATCGGAGGACCGAAGGAGCTAACCG  
CTTTTGACAAACATGGGGATCATGTAACTGCCCTGATGTTGGAACCGGAGCTGAATGAAGCCAT  
ACCAACGACGAGCGTACACACGATGCCGTAGCAATGGCAACACGTTGCGCAAACATTAAACTGGC  
GAACACTTACTCTAGCTCCCGAACAAATTAAATAGACTGGATGGAGGCCATAAGTTGAGCAGGACAC  
TTCTCGCGCTCGGCCCTCCGGCTGGCTGGTTATTGCTGATAAAATCTGGAGCCGGTGAGCGTGGGTCTCG  
CGGTATCATGCGACTGGGCCAGATGGTAAGCCCTCCGTATCGTAGTTATCTACACGACGGGAGT  
CAGGCAACTATGGATGAAAGAAATAGACAGATCGCTGAGATAGGTGCGTCACTGATTAAGCATTGGTAAC  
TGTCAAGACCAAGTTACTCATATAACTTAGATTGATTAAAATTCTATTAAATTAAAAGGATCTA  
GGTGAAGATCCTTTGATAATCTCATGACCAAAATCCCTAACGTGAGTTCTGTTCCACTGAGCGTCA  
GACCCCGTAGAAAGATCAAAGGATCTTCTGAGATCCTTTCTGCCGTATCTGCTGCTGCAAA  
CAAAAAAACCCGCTACCGGGCAGCTGGGGTTGCTGCCGGATCAAGAGCTACCAACTCTTCCGAAAGGT  
AACTGGCTTCAGCAGAGCGCAGACCAAAACTGTTCTCTAGTGAGCCGTAGTTAGGCCACCACTTC  
AAGAACCTGTAGCACCGCCTACATACCTCGCTGCTAACCTGTTACCAAGTGGCTGCTGCCAGTGGCG  
ATAACTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACGGATAAGGCGCAGCGGTGGCTGAAC  
GGGGGGTTCGTGCACACAGCCCAGCTGGAGCGAACCGACCTACACCGAACTGAGATAACCTACAGCGTGAG  
CTATGAGAAAGGCCACGCCCTCCGAAGGGAGAAAGGCCGACAGGTATCCGTAAGGCCAGGGTCGGAA  
CAGGAGAGCGCACGCCAGAGGGAGCTCCAGGGGAAACGCCCTGGTATCTTATAGTCCTGCTGGGTTCGCCA  
CCTCTGACTGAGCGTCGATTGCTGATGCTCGTCAAGGGGGCGGAGCCTATGGAAAAACGCCAGCAAC  
GCCGCCCTTTACGGTCTGCCCTTTGCTGCCCTTGCTCACATGTTCTCTGCTTATCCCTG  
ATTCTGTGGATAACCGTATTACCGCTTGAGTGAGCTGATACCGCTGCCGCAGCGAACGACCGAGCG  
CAGCGAGTCAGTGAGCGAGGAAGCGGAAGAGCGCCAAACGCAAACCGCCTCTCCCGCGCTGGCG  
ATTCAATTAGCGAGCTGGCACGACAGGTTCCGACTGGAAAGCGGGAGCTGAGCGCAACGCAATTAAATG  
TGAGTTAGCTCACTCATTAGGCACCCAGGCTTACACTTATGCTTCCGGCTCGTATGTTGTGGAAT  
TGTGAGCGGATAACAATTACACAGGAAACAGCTATGACCATGATTACGCCAAGCGCGAATTAAACCC  
CACTAAAGGAACAAAGCTGGAGCTGCAAGCTT

Please amend Table 19 on pages 437-439 as follows:

Table 19: Nucleotide sequence of pLenti4/V5-DEST (SEQ ID NO: 107).

AATGTAGTCTTATGCAATACTCTGTAGTCTTGCACATGGTAACGATGAGTTAGCAACATGCCCTAACAA  
GGAGAGAAAAAGCACCGTCATGCCATTGGTGGAAAGTAAGGTGGTAGCATCGTCGCCATTAGGAAGGC  
AACAGACGGCTGACATGGATTGGACGAACCACTGAATTGCCATTGCAGAGATATTGTATTAAAGTG  
CCTAGCTCGATACATAACGGCTCTCTGGTAGACCAGATCTGAGCCTGGAGCTCTGGCTAACTA  
GGGAACCCACTGCTTAAGCCTCAATAAGCTTGAGTCTCAAGTAGTGTGTGCCGTCTGTTGT  
GTGACTCTGGTAACTAGAGATCCCTCAGACCCCTTTAGTCAGTGTGGAAAATCTCTAGCAGTGGCGCCCG  
AACAGGGACTTGAAAGCAGGGAAACCAAGAGGAGCTCTCGACGCAGGACTCGGCTGCTGAAGCGC  
GCACGGCAAGAGGCGAGGGCGGCAGTGGTAGTACGCCAAAATTGGACTAGCGGAGGCTAGAAGGA  
GAGAGATGGTGCAGAGCGTCAGTATTAAGCGGGGAGAATTAGATCGCGATGGGAAAAATTGGTTA  
AGGCCAGGGGAAAGAAAAAATATAATTAAACATATAGTATGGCAAGCAGGGAGCTAGAACGATTG  
CAGTTAACCTGGCCTGTTAGAACATCAGAAGGCTGAGACAAATACTGGGACAGCTACAACCCTC  
TCAGACAGGATCAGAAGAACTTAGATCATTATATAACAGTAGCAACCCCTATTGTGTGCATCAAAGG  
ATAGAGATAAAAGACACCAAGGAAGCTTAGACAAGATAGAGGAAGAGCAAAACAAAAGTAAGACCACCG  
CACAGCAAGCGGCCGCTGATCTCAGACCTGGAGGAGGAGATATGAGGGACAATTGGAGAAGTGAATTAT  
ATAAATATAAAAGTAGTAAAATTGAACCATTAGGAGTAGCACCACCAAGGAAAGAGAAGAGTGGTGA  
GAGAGAAAAAGAGCAGTGGGATAGGAGCTTGTCCCTGGGTTCTGGGAGCAGCAGGAAGCACTATG  
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATGTCTGGTATAGTCAGCAGCAGAAC  
ATTGCTGAGGGCTATTGAGGCCAACAGCATCTGTTGCAACTCACAGTCTGGGCATCAAGCAGCTCCA  
GGCAAGAACCTGGCTGTGGAAAGATACTAAAGGATCAACAGCTCTGGGATTGGGTTGCTCTGGA  
AAACTCATTGCACCACTGCTGTGCCTTGAATGCTAGTGGAGTAATAATCTCTGGAACAGATTGGA  
ATCACACGACCTGGATGGAGTGGACAGAGAAATTAAACAATTACACAAGCTTAATACACTCCTTAATTGA  
AGAATCGAAAACCAGCAAGAAAAGAATGAACAAGAATTATTGAAATTAGATAATGGCAAGTTGTGG  
AATTGGTTAACATAACAAATTGGCTGTGGTATATAAAATTATTCAATGATAGTAGGAGGCTGGTAG  
GTTAAGAATAGTTTGCTGTACTTCTATAGTGAATAGAGTTAGGCAGGGATATTCAACATTATCGTT  
TCAGACCCACCTCCAACCCCGAGGGGACCGACAGGCCAGGAAGGAATAGAAGAAGAAGGTGGAGAGA  
GACAGAGACAGATCCATTGATTAGTGAACGGATCTGACGGTATCGATAAGCTGGAGTCCCGCTTA  
CATAACTTACGGTAATGGCCCGCTGGCTGACGCCAACGACCCCCGCCATTGACGTCAATAATGAC  
GTATGTTCCATAGTAACGCCAATAGGACTTCCATTGACGTCAATGGTGGAGTATTACGGTAAACT  
GCCCACTTGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCTATTGACGTCAATGACGGTAAAT  
GGCCCGCCTGGCATTATGCCAGTACATGACCTTATGGACTTCTACTGGCAGTACATCTACGTATT  
AGTCATCGCTATTACCATGGTGTGCGGTTTGGCAGTACATCAATGGCGTGGATAGCGGTTGACTCA  
CGGGGATTCCAAGTCTCACCCATTGACGTCAATGGAGTTGGTTGGCACCAAAATCAACGGGACT  
TTCCAAAATGCGTAACAACTCCGCCATTGACGCAAATGGCGTAGGGCTGTACGGTGGAGGTCTA  
TATAAGCAGAGCTCGTTAGTGAACCGTCAGATGCCCTGGAGACGCCATCACGCTGTTTGACCTCCAT  
AGAAGACACCGACTCTAGAGGATCCACTAGTCCAGTGTGGAGATTCTGAGATATCAACAAGTTGTA  
CAAAAAGCTGAACGAGAAACGTAATGATATAAAATCAATATATTAAATTAGATTGCTATAAAAAA  
CAGACTACATAACTGTAACACACACATATCCAGTCACATGGCGCCGATTAGGCACCCAGGCTT  
TACACTTATGCTTCCGGCTCGTATAATGTGTGGATTGAGTTAGGATCCGGAGATTTCAGGAGCT  
AAGGAAGCTAAATGGAGAAAAAAACTCGGATATACCAACCGTTGATATATCCAATGGCATCGTAAAG  
AACATTGGAGGCATTCACTGAGTGTGCTCAATGTACCTATAACCAACAGACGTTGAGCTGGATATTACGGC  
CTTTTAAAGACCGTAAAGAAAAAAGCACAAGTTTATCCGCCATTACATCTTGGCCTG  
ATGAATGCTCATCGGAATTCCGTATGGCAATGAAAGACGGTAGCTGGTAGATGGGATAGTGTTCACC  
CTTGTACACCGTTTCCATGAGCAAACGTTTACATCGCTCTGGAGTGAATACACGACGATT  
CCGGCAGTTCTACACATATTGCAAGATGTGGCGTTACGGTAAACCTGCCATTCCCTAA  
GGTTTATTGAGAATATGTTTGTCTCAGCAAACCGCTGGTAGTTACCATGGGAAATATTACGCAAGGCGACAAGGT  
TGGCCAATATGGACAACCTTCTGCCCGGTTTACCATGGGAAATATTACGCAAGGCGACAAGGT  
GCTGATGCCGCTGGCGATTCACTGAGTGTGAGTGGCTTCCATGTCGGCAGAATGCTTAAT  
GAATTACAACAGTACTGCGATGAGTGGCAGGGCGTAAAGATCTGGATCCGGCTTACTAAAAGCCA  
GATAACAGTATGCGTATTGCGCGCTGATTGCGGTATAAGAATATACTGATATGTATACCGAAG  
TATGTCAAAAGAGGTTGCTATGAAGCAGCGTATTACAGTGAAGCAGCTATCAGTTGC  
TCAAGGCATATGATGTCAATATCTCGGTCTGGTAAGCACAACCATGCGAGAATGAAGCCGTCGCTG  
CGTGCAGCGCTGGAAAGCGAAAATCAGGAAGGGATGGCTGAGGTGCCCCGTTATTGAAATGAACG

Table 19 (continued) Nucleotide sequence of pLenti4/V5-DEST (SEQ ID NO: 107).

GCTTTGCTGACGAGAACAGGGACTGGTAAATGCAGTTAAGGTTACACCTATAAAAGAGAGGCC  
GTTATCGTCGTTGGATGTACAGAGTGATATTATTGACACGCCGGCGACGGATGGTATCCCCCT  
GCCAGTCACGCTGTCAGATAAAGTCTCCGTGAACCTTACCCGGTGCATATCGGGATGAA  
AGCTGGCGCATGATGACCACCGATATGCCAGTGTGCCGGTCTCCGTATCGGGAAAGAAGTGGCTGATC  
TCAGCCACCGCAAATGACATAAAAACGCCATTAAACCTGATGTTCTGGGAATATAATGTCAGGCTC  
CGTTACACAGCCAGTCTGCAGGTGCACCATAGTGACTGGATATGTTGTTTACAGTATTATGAGT  
CTGTTTTATGCAAATCTAATTAAATATTGATATTATTCATTACGTTCTCGTCAGCTTC  
TTGTACAAAGTGGTGTATCCAGCACAGTGGCGGCCGCTGAGTCTAGAGGGCCCGGTTCGAAGGTA  
ACCCATCCCTAACCCCTCCTCGGTCTGATTCTACGCGTACCGTTAGTAATGAGTTGGAATTAAATT  
CTGTGGAATGTGTGTAGTTAGGGTGTGGAAAGTCCCAGGCTCCCCAGGCAGGCAGAAGTATGCAAAGC  
ATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAA  
GCATGCATCTCAATTAGTCAGCAACCATACTCCGCCCTAACCTCCGCCATCCGCCCTAACCTCGCC  
CAGTCCGCCATTCTCCGCCATGGCTGACTAAATTTTTATTGAGGCGCTAGGCTTTGCAAAAAGCTCCCC  
GCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTGAGGCGCTAGGCTTTGCAAAAAGCTCCCC  
TGTGACAATTAAATCATGGCATAGTATATCGGCATAGTATAACGACAAGGTGAGGAACAAACCATG  
GCCAAGTTGACCAGTGGCGTCCGGTCTACCGCGCGACGTCGCCGGAGCGGTGAGTTCTGGACCG  
ACCGGCTCGGGTCTCCCGGACTTCGTGGAGGACGACTTCGCCGGTGTGGTCCGGGACGACGTGACCT  
GTTCATCAGCGCGGTCCAGGACCAGGTGGTCCGGACAACACCCCTGGCCTGGGTGTGGTGCAGGCC  
GACGAGCTGTACGCCAGTGGTCCGGAGGTGTCCACGAACTCCGGACGCCCTCCGGCGGCCATGA  
CCGAGATCCCGAGCAGCGTGGGGCGGGAGTTGCCCTGCGCACCGGCCGGCACTCGTGCACCT  
CGTGGCGAGGAGCAGGACTGACACGTCTACGAGATTAAATGGTACCTTAAGACCAATGACTTACAA  
GGCAGCTGTAGATCTTAGCCACTTTAAAAGAAAAGGGGGACTGGAAGGGCTAATTCACTCCAACGA  
AGACAAGATCTGTTTGCTGTACTGGTCTCTGGTTAGACCAGACTGAGCCTGGAGCTCTG  
GCTAACTAGGGAAACCACTGCTTAAGCCTAACCTAAAGCTTGCCTGAGTGTCAAGTAGTGTGCCCC  
TCTGTTGTGACTCTGTAACTAGAGATCCCTCAGACCCCTTATGAGTGTGAAATCTCTAGCAGT  
AGTAGTTCATGTCATTTATTAGTCACTTAAACTGCAAGAAATGAATATCAGAGAGTGAGAGGA  
ACTTGTATTGAGCTTAAATGGTTACAAATAAGCAATAGCATCACAAATTTCACAAATAAGCATT  
TTTTCACTGCATTCTAGTTGGTTGTCACACTCATCAATGTATCTTATCATGTCGGCTCTAGCTA  
TCCCGCCCTAACCTCCGCCATCCGCCCTAACCTCCGCCAGTCCGCCATTCTCCGCCCATGGCTG  
ACTAATTTTTTATTGAGCTTAAATGGTTAGGAGGCGCTAGGAGCTTACGAGCTTACGAGAAGTGTGAGGA  
GGCTTTGGAGGCTAGGACGTACCCAATTGCCCTATAGTGAGTCGATTACGCGCGCTACTGGC  
CGCGTTTACAACGCGTACTGGAAACCCCTGGCGTACCCAACCTAACGCGCTTGCGCACATCCC  
CCTTCGCCAGCTGGCGTAATAGCGAAGAGGCCGACCGATGCCCTCCAACAGTTGCGCAGCCTGA  
ATGGCGAATGGGACGCCCTGTAGCGCGCATTAAAGCGCGGGGTGTGGTACGCGCAGCGTGC  
CGCTACACTGCCAGGCCCTAGGCCCGCTCTCGCTTCTCCCTCTCGCACGTTGCC  
GGCTTCCCGTCAAGCTCAAATGGGGCTCCCTTAGGTTCCGATTAGTGTCTTACGGCACCTCG  
ACCCCAAAACTTGATTAGGGTGTGGTACGAGTGGCCATGCCCTGATAGACGGTTTCGCC  
TTGACGTTGGAGTCCACGTTAAATAGTGACTCTGTTCAAACACTGGAACAAACACTCAACCTATC  
TCGGTCTATTCTTTGATTATAAGGGATTGCGATTGCCCTATTGTTAAAAATGAGCTGATT  
AACAAAATTAAACGCAATTAAACAAATATAACGCTTACAATTAGTGGCATTTCGGGAAAT  
GTGCGCGAACCCCTATTGTTATTGCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAAC  
CCTGATAAAATGCTTCAATAATATTGAAAAGGAAGAGTATGAGTATTCAACATTCCGTGCGCCCTAT  
TCCCTTTTGCGGCATTGCCCTCTGCTCACCAAGAACGCTGGTGAAGTAAAGATGCT  
GAAGATCAGTTGGGTGACAGTGGTTACATCGAACCTGGATCTAACAGCGGTAAGATCCTGAGAGTT  
TTCGCCCGAAGAACGTTTCCAATGATGAGCATTAAAGTCTGCTATGTGGCGGGTATTATCCG  
TATTGACGCCGGCAAGAGCAACTCGGTGCCGCATACACTATTCTCAGAATGACTGGTTGAGTACTCA  
CCAGTCACAGAAAGCATCTACGGATGGCATGACAGTAAGAGAAATTGAGCTGCTGCCATAACCATGA  
GTGATAACACTGCCAGAACCTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTGCA  
CAACATGGGGATCATGTAACCGCTTGATCGTGGAAACCGGAGCTGAATGAAGCCATACAAACGAC  
GAGCGTGCACCAACGATGCCCTGTAGCAATGGCAACAAACGTTGCCAAACTATTAACTGGCGAACTACTTA  
CTCTAGCTCCCGCAACAATTAAAGACTGGATGGAGGCGATAAAGTTGAGGACCACTCTCGCGCTC  
GGCCCTCCGGCTGGCTGGTTATTGCTGATAAATCTGGAGCCGGTGAGCGTGGTCTCGCGGTATCATT  
GCAGCACTGGGGCAGATGGAAGCCCTCCCGTATCGTAGTTACACGACGGGAGTCAGGCAACTA  
TGGATGAACGAAATAGACAGATCGCTGAGATAGGTGCTCACTGATTAAGCATTGTAACGTGAGACCA  
AGTTTACTCATATATACTTTAGATTGATTAAAACCTCATTAAATTAAAGGATCTAGGTGAAGATC

Table 19. Nucleotide sequence of pLenti4/V5-DEST (SEQ ID NO: 107).

CTTTTGATAATCTCATGACCAAAATCCCTAACGTGAGTTTCGTTCCACTGAGCGTCAGACCCCCGTAG  
AAAAGATCAAAGGATCTTCTTGAGATCCTTTCTGCGCGTAATCTGCTGCTGCAAACAAAAAACC  
ACCGCTACCAGCGGTGTTGCGGATCAAGAGCTACCAACTCTTTCCGAAGGTAACTGGCTTC  
AGCAGAGCGCAGATAACCAAAACTGTTCTCTAGTGTAGCCGTAGTTAGGCCACCACCTCAAGAACTCTG  
TAGCACCGCCTACATAACCTCGCTCGTAATCCTGTTACCAGTGGCTGCCCAGTGGCATAAGTCGTG  
TCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCGGCTGAACGGGGGTTCG  
TGCACACAGCCCAGCTGGAGCGAACGACCTACACCGAAGTACCTACAGCGTGAGCTATGAGAAA  
GCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGTAAGCGGCAGGGTCGGAACAGGAGAGCG  
CACGAGGGAGCTTCCAGGGGAAACGCCTGGTATCTTATAGTCCTGTCGGTTGCCACCTCTGACTT  
GAGCGTCGATTGGTGTGATGCTCGTCAGGGGGCGGAGCCTATGAAAAACGCCAGCAACGCGGCCCTTT  
TACGGTTCTGGCCTTTGCTGGCCTTGCTCACATGTTCTTCCTGCGTTATCCCTGATTCTGTGGA  
TAACCGTATTACCGCCTTGAGTGAGCTGATACCGCTCGCCGACGCCAACGACCGAGCGCAGCGAGTC  
GTGAGCGAGGAAGCGGAAGAGCGCCAATACGCAAACCGCCTCTCCCGCGCTGGCGATTCAATTAAAT  
GCAGCTGGCACGACAGGTTCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTATGTGAGTTAGCT  
CACTCATTAGGCACCCCAGGCTTACACTTATGCTCCGGCTCGTATGTTGTGGAATTGTGAGCGGA  
TAACAATTTCACACAGGAAACAGCTATGACCATGATTACGCCAAGCGCGCAATTAAACCTCACTAAAGGG  
AACAAAAGCTGGAGCTGCAAGCTT

Please amend Table 20 on pages 440- 442 as follows:

Table 20: Nucleotide sequence of pLenti6/UbC/V5-DEST (SEQ ID NO: 108).

AATGTAGTCTTATGCAATACTCTGTAGTCTTGCACATGGTAACGATGAGTTAGCAACATGCCTTACAA  
GGAGAGAAAAAGCACCGTGCATGCCGATTGGTGAAGTAAGGTGGTACGATCGTCGCTTATTAGGAAGGC  
AACAGACGGTCTGACATGGATTGGACGAACCACTGAATTGCCCATTCAGAGAGATATTGTATTAAAGTG  
CTTAGCTCGATACATAAACGGTCTCTCTGGTAGACCAGATCTGAGCCTGGGAGCTCTGGCTAACTA  
GGGAACCCACTGTTAACGCTCAATAAGCTTGCCTTGAGTGCTCAAGTAGTGTGCCCCGTCTGTTGT  
GTGACTCTGTAACTAGAGATCCCTCAGACCCCTTGTAGTCAGTGTGAAAATCTCTAGCAGTGGCGCCCG  
AACAGGGACTTGAAAGCGAAAGGGAAACCAAGAGGAGCTCTCGACGCAGGACTCGGCTGCTGAAGCGC  
GCACGGCAAGAGGCAGGGCGGGCAGTGGTAGTACGCCAAAATTGACTAGCGGAGGCTAGAAGGA  
GAGAGATGGGTGCGAGAGCGTCAGTATTAGCGGGGAGAATTAGATCGCAGTGGGAAAAATTGGTTA  
AGGCCAGGGGAAAGAAAAATATAAATTAAACATATAGTATGGCAAGCAGGGAGCTAGAACGATTG  
CAGTTAACCTGGCTGTTAGAACATCAGAAGGCTGTAGACAAATACTGGGACAGCTACAACCCT  
TCAGACAGGATCAGAAGAACTTAGATCATTATAACAGTAGCAACCCCTTATTGTGTGATCAAAGG  
ATAGAGATAAAAGACACCAAGGAAGCTTAGACAAGATAGAGGAAGAGCAAAACAAAGTAAGACCACCG  
CACAGCAAGCGGCCGCTGATCTCAGACCTGGAGGAGGAGATATGAGGGACAATTGGAGAAGTGAATTAT  
ATAAATATAAAGTAGTAAAATTGAACCATTAGGAGTAGCACCACCAAGGCAAAGAGAAGAGTGGTGC  
GAGAGAAAAAGAGCAGTGGGAATAGGAGCTTGTCCCTGGGTTCTGGGAGCAGCAGGAAGCACTATG  
GGCGCAGCGTCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTCAGCAGCAGAACA  
ATTGCTGAGGGCTATTGAGGCACACAGCATCTGTCACACTCACAGTCTGGGCATCAAGCAGCTCCA  
GGCAAGAACCTGGCTGTGGAAAGATACTAAAGGATCAACAGCTCTGGGATTGGGTTGCTCTGG  
AAACTCATTGACCACTGCTGTGCTTGGAAATGCTAGTTGGAGTAATAAATCTCTGGAACAGATTGG  
ATCACACGACCTGGATGGAGTGGGACAGAGAAATTACAATTACACAAGCTTAACACTCCTTAATTGA  
AGAATCGAAAACCAGCAAGAAAAGAATGAACAAGAATTAGATAAAATGGCAAGTTGTGG  
AATTGGTTAACATAACAAATTGGCTGTGGTATATAAATTATTCTATAATGATAGTAGGAGGCTGGTAG  
GTTAAGAATAGTTTGCTGTACTTCTATAGTAGTGAATAGAGTTAGGCAGGGATATTCACTTATCGTT  
TCAGACCCACCTCCCACCCCGAGGGGACCCGACAGGCCAGGAAGGAATAGAAGAAGAAGGTGGAGAGA  
GACAGAGACAGATCCATTGATTAGTGAACGGATCTCGACGGTACGGATCTGGCCTCCGCCGGGTT  
TGGCGCCTCCCGGGCGCCCCCTCCTCACGGCGAGCGCTGCCACGTCAGACGAAGGGCGCAGGACGCT  
CCTGATCCTCCGCCGGACGCTCAGGACAGGCCGCTGCTCATAAAGACTCGGCCTAGAACCCAGT  
ATCAGCAGAAGGACATTAGGACGGACTGGGTGACTCTAGGGACTGGTTCTTCCAGAGAGCGG  
AACAGGCAGGAAAAGTAGTCCCTCTCGCGATTCTCGGGAGGGATCTCGTGGGGCGGTGAACGCCGA  
TGATTATATAAAGGACCGCGCCGGGTGTCACAGCTAGTCCCGTCAGCGGGGATTGGGTCGGTTCT  
TGTGGATCGCTGTGATCGTCACTGGTAGTACGGGGCTGCTGGGCTGGCGGGGCTTCGTGGCC  
GCCGGGCCGCTCGGTGGACGGAAAGCGTGTGGAGAGACGCCAGGGCTGTAGTCTGGTCCGCCGAGCA  
GGTGCCTGAACTGGGGTTGGGGGAGCGCAGCAAAATGCCGCTGTTCCGAGTCTGAATGGAAGA  
CGCTTGTGAGGCGGGCTGTGAGGTCGTTGAAACAAGGTGGGGCATGGTGGCGCAAGAACCCAGGT  
CTTGAGGCCTTCGCTAATGCCGAAAGCTTATTGGGTGAGATGGCTGGGGCACCATCTGGGACCC  
TGACGTGAAGTTGTCACTGACTGGAGAACCTGGTTGCTGTGTTGCCGGGCGGAGTTATGCCGT  
CCGTTGGCAGTGCACCGTACCTTGGAGCGCGCCCTCGTGTGTCGTGACGTACCCGTTCTGTT  
GGCTTATAATGCAAGGGTGGGCCACCTGCCGTAGGTGTGCGGTAGGCTTCTCCGTCGCAGGACGCA  
GGTCGGGCCTAGGGTAGGCTCTCTGAATGACAGGCCGACCTCTGGTAGGGGAGGGATAAGTGA  
GGCGTCAGTTCTTGGCGTTTATGTACCTATCTTAAAGTAGCTGAAGCTCCGGTTTGAACAT  
GGCCTGGGGTTGGCGAGTGTGTTGTGAAGTTTTAGGCACCTTGTAAATGTAATCATTTGGTCA  
ATATGTAATTTCAGTGTAGACTAGTAAATTGTCGCTAAATTCTGGCGTTTTGGCTTTTGTGTTAG  
ACGAAGCTGGTACCGAGCTGGATCCACTAGTCCAGTGTGGTAGTACCAACAGATTTCAGGAG  
TACAAAAAAGCTGAACGAGAACGTAATGATATAAATCAATATATTAAATTAGATTTGCATAAAA  
AACAGACTACATAATACTGTAAAACACAACATATCCAGTCACATGGCGCCGCATTAGGCACCCAGGC  
TTTACACTTTATGCTTCCGGCTCGTATAATGTGTGGATTGGAGTTAGGATCCGGAGATTTCAAGGAG  
CTAAGGAAGCTAAATGGAGAAAAAAACTGGATATACCACCGTTGATATATCCCAATGGCATCGTAA  
AGAACATTGAGGCATTCAGTCAGTTGCTCAATGTACCTATAACCAGACCGTTCAGCTGGATATTACG  
GCCTTTTAAAGACCGTAAAGAAAAATAAGCACAAGTTTATCCGGCTTATTCACTTCTGCCGCC  
TGATGAATGCTCATCCGGATTCCGTATGCCAATGAAAGACGGTAGCTGGTAGATGGGATAGTGTG  
CCCTGTTACACCGTTTCCATGAGCAAACGGTTTACGCTCTGGAGTGAATACCACGACGAT  
TTCCGGCAGTTCTACACATATTCGCAAGATGTGGCGTGTACGGTAAAACCTGGCCTATTCCCTA

Table 20 (continued) Nucleotide sequence of pLenti6/UbC/V5-DEST (SEQ ID NO: 108).

AAGGGTTATTGAGAATATGTTTCGTCTCAGCCAATCCCTGGGTGACTTCACCAAGTTGATTAAA  
CGTGGCCAATATGGACAACCTTCTCGCCCCCGTTTACCATGGGCAAATATTATACGCAAGGGACAAG  
GTGCTGATGCCGCTGGCGATTCAAGGTTCATCATGCCGCTGTGATGGCTTCCATGCGGCAGAAATGCTTA  
ATGAATTACACAGTACTGCGATGGCAGGGCGGGCGTAAAGATCTGGATCCGGCTTACTAAAAGC  
CAGATAACAGTATGCGTATTGCGCGTATTGCGGTATAAGAATATACTGATATGTATACCGA  
AGTATGTAAAAAGAGGGTGTGCTATGAAGCAGCGTATTACAGTGACAGTTGACAGCGACAGCTATCAGTT  
GCTCAAGGCATATATGATGTCAATATCTCCGGTCTGGAAGCACAACCAGTCAGAAATGAAGCCCGTCGTC  
TGCCTGCCAACGCTGAAAGCGAAAATCAGGAAGGGATGGCTGAGGTGCCCCGGTTATTGAAATGAA  
CGGCTCTTGCTGACGAGAACAGGGACTGGTGAAATGCAGTTAAGGTTACACCTATAAAAGAGAGAG  
CCGTTATCGTCTGTTGTGGATGTACAGAGTGTATTATTGACACGCCCGGGGACGGATGGTGTATCCCC  
CTGGCCAGTGCACGTCTGCTGTCAGATAAAGTCTCCGTGAACTTTACCCGGTGGTGCATATGGGGATG  
AAAGCTGGCGCATGATGACCACCGATATGCCAGTGTGCCGGTCTCGTTATGGGGAAAGAAGTGGCTGA  
TCTCAGCCACCGCGAAAATGACATAAAAACGCCATTAAACCTGATGTTCTGGGAATATAATGTCAGGC  
TCCGTTATACACAGCCAGTCTGCAGGTGACCATAGTGACTGGATATGTTGTTACAGTATTATGTA  
GTCCTGTTTTATGAAAATCTAATTAAATATTGATATTATATCATTACGTTCTCGTCAGCTT  
TCTTGTACAAAGTGGTGTGATATCCAGCACAGTGGCGCCGCTCGAGTCTAGAGGGCCCGGGTCAAGG  
TAAGCCTATCCCTAACCTCTCGGTCTGATTCTACCGTACCGGTTAGTAATGAGTTGGAAATTAA  
TTCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGGCAGGCAGAAAGTATGCAA  
GCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAAGTATGCA  
AAGCATGCATCTCAATTAGTCAGCAACCAGTCCCCCCCTAACCTCCGCCATCCGCCCTAACCTCG  
CCCAAGTCCGCCATTCTCCGCCATGGCTGACTAAATTTTTATTGACAGAGGCCAGGGCGCCT  
CTGCCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTGAGGCTAGGCTTTGCAAAAAGCTCCC  
GGGAGCTTGATATCCATTTCGGATCTGATCAGCACGTGTTGACAATTATCATGGCAGTAGTATATCG  
GCATAGTATAATGACAAGGTGAGGAACCTAAACCATGGCCAAGCCTTGCTCAAGAAGAATCACCCT  
CATTGAAAGAGCAACGGCTACAACTAACAGCATCCCCATCTCTGAAGACTACAGCGTCGCCAGCGCAGCT  
CTCTCTAGCGACGGCCGATCTCACTGGTGTCAATGTATATCATTACTGGGGACCTTGTGAGAAC  
TCGTGGTGTGGCACTGCTGCTGCCAGCTGGCACCTGACTGTATCGTCGCGATGGAAATGA  
GAACAGGGGCATCTGAGCCCTGCCAGGTGCCAGGGTCTCGATCTGCATCCTGGATCAA  
GCCATAGTGAAGGACAGTGATGGACAGCCGACGGCAGTTGGGATTGTAATTGCTGCCCTCTGTTATG  
TGTGGGAGGGCTAACGACAATTGAGCTCGGTACCTTAAGACCAATGACTTACAAGCAGCTGTAGATC  
TTAGCCACTTTAAAAGAAAAGGGGGACTGGAAGGGCTAATTCACTCCAACGAAGACAAGATCTGCT  
TTTGCTTGTACTGGGCTCTGGTTAGACAGATCTGAGCCTGGAGCTCTGGCTAACTAGGGAAC  
CCACTGCTTAAGCCTCAATAAGCTTGCTGAGTGCTCAAGTAGTGCTGCCCTGTGTTGTGACT  
CTGGTAACTAGAGATCCCTCAGACCCCTTGTAGTCAGTGAAAATCTCTAGCAGTAGTACTGTTCATGTCA  
TCTTATTATTCACTGAAAGAAAATGAATATCAGAGAGTGAGAGGAACCTGTTATTGCA  
GCTTATAATGTTACAATAAGCAATAGCATCACAAATTACAAATAAGCATTTTCACTGCATT  
CTAGTTGTGGTTGTCCAAACTCATCAATGTATCTTATCATGTCGGCTCTAGCTATCCGCCCTAAC  
CCGCCCATCCGCCCTAACCTCCGCCAGTTCCGCCATTCTCCGCCATGGCTGACTAACCTTTTA  
TTTATGCAGAGGCCAGGCCCTCGGCCCTTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTGGAGG  
CCTAGGGACGTACCCAAATTGCCCTATAGTGAGTCGATTACGCCGCTCACTGGCCGCTGTTTACAAC  
GTCGTGACTGGAAAACCCCTGGCTTACCCAACTTAATGCCCTGAGCACATCCCCCTTCGCCAGCTG  
GGTAATAGCGAAGAGGCCGACCGATGCCCTCCAAACAGTTGCCAGCCTGAATGGCAATGGAC  
GCCCTGTAGCGCGCATTAGCGCGGGGTGTGGTGTACGCCAGCGTACACTGCC  
GCCCTAGGCCGCTCTTCTGTTCTCCCTTCTGCCACGGTCCGCGCTTCCCGTCA  
AGCTCTAAATGGGGCTCCCTTGTGGTTCAGTGTGGCATGCCCTGATAGACGGTTTCTGCCCTTGACGTTGGAGT  
CCACGTTTTAATAGGACTCTGTTCCAAACTGGAACAACACTCAACCCATCTGGCTATTCTT  
TGATTATAAGGGATTGCGATTGCGCTATTGGTTAAAAATGAGCTGATTTAACAAAATTTAAC  
GCGAATTAAACAAAATTTAACGCTTACAATTAGGTGGCAGTTTCCGGAAATGTGCGCGAACCC  
TATTGTTATTCTAAATACATTCAAAATATGTATCCGCTCATGAGACAATAACCTGATAATGCTT  
CAATAATATTGAAAAGGAAGAGTATGAGTATTCAACATTCCGTGCGCCCTTATTCCCTTTTGC  
CATTTGCCCTCTGTTTGCTCACCCAGAAACGCTGGTAAAGTAAAAGATGCTGAAGATCAGTTGG  
TGCACGAGTGGGTTACATCGAACTGGATCTCAACAGCGGTAAGATCCTGAGAGTTTCCGCCAGGAAAGAA  
CGTTTCCAATGATGAGCACTTTAAAGTCTGCTATGTGGCGGGTATTATCCGTATTGACGCCGGGC  
AAGAGCAACTCGGTCGCCGCATACACTATTCTCAGAATGACTGGTGTGAGTACTCACCAGTCACAGAAAA

Table 20 (continued) Nucleotide sequence of pLenti6/UbC/V5-DEST (SEQ ID NO: 108).

GCATCTTACGGATGGCATGACAGTAAGAGAAATTATGCAGTGCTGCCATAACCATGAGTGATAACACTGCG  
GCCAACTTACTTCTGACAACGATCGGAGGACGAAGGAGCTAACCGCTTTTGACAAACATGGGGGATC  
ATGTAACTCGCCTTGATCGTTGGAACCGGAGCTGAATGAAGCCATAACCAAACGACGAGCGTGACACCAC  
GATGCCCTGTAGCAATGCAACACGTTGCGCAAACACTTTAACCTGGCGAACTACTTACTCTAGCTTCCC  
CAACAATTAAATAGACTGGATGGAGGCGGATAAAGTTGCAGGACCACTTCTGCGCTCGGCCCTCCGGCTG  
GCTGGTTATTGCTGATAAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGGTATCATTGAGCACTGGGGCC  
AGATGGTAAGCCCTCCGTATCGTAGTTATCTACACCGACGGGGAGTCAGGCAACTATGGATGAACGAAAT  
AGACAGATCGCTGAGATAGGTGCTCACTGATTAAGCATTGTAACGTGACCCAAGTTACTCATATA  
TACTTTAGATTGATTTAAAACCTCATTAAATTAAAGGATCTAGGTGAAGATCCTTTGATAATCT  
CATGACCAAAATCCCTAACGTGAGTTTCGTTCCACTGAGCGTCAGACCCGTAGAAAAGATCAAAGGA  
TCTTCTTGAGATCCTTTCTGCGCTAATCTGCTGCAAACAAAAACACCACCGCTACAGCG  
TGGTTGTTGCCGGATCAAGAGCTACCAACTCTTTCCGAAGGTAACGGCTTCAGCAGAGCGCAGAT  
ACCAAATACTGTTCTCTAGTGTAGCCGTAGTTAGGCCACCACTCAAGAACTCTGTAGCACCGCCTACA  
TACCTCGCTCTGCTAACCTGTTACCAAGTGGCTGCGCTGCGATAAGTCGTGCTTACCGGGTTGG  
ACTCAAGACGATAGTTACCGGATAAGCGCAGCGTGGCTGAACGGGGGTTCTGACACAGCCCAG  
CTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTAGCTATGAGAAAGGCCACGCTTCCC  
GAAGGGAGAAAGCGGACAGGTATCCGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTC  
CAGGGGGAAACGCCTGGTATCTTATAGTCCTGTCGGTTCCACCTCTGACTTGAGCGTCGATTTT  
GTGATGCTCGTCAGGGGGCGGAGCCTATGGAAAAACGCCAGCAACCGCCCTTTACGGTTCTGCC  
TTTGCTGCCCTTGCTCACATGTTCTTCCTGCTTATCCCCGATTCTGTGGATAACCGTATTACCG  
CCTTGAGTGAGCTGATACCGCTCGCCGACCGAACGACCGAGCGCAGCGAGTCAGTGAGCGAGGAAGC  
GGAAGAGGCCAATACGCAAACCGCCTCCCCGCGCTGGCGATTCAATTAGCAGCTGGCACGAC  
AGGTTTCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAATTATGTGAGTTAGCTACTCATTAGGCAC  
CCAGGCTTACACTTTATGCTTCCGGCTCGTATGTTGTGGAATTGTGAGCGGATAACAATTACAC  
AGGAAACAGCTATGACCATGATTACGCCAAGCGCGCAATTAAACCTCACTAAAGGAACAAAGCTGGAG  
CTGCAAGCTT

Please amend Table 21 on pages 443-445 as follows:

Table 21: Nucleotide sequence of plasmid pLP1 (SEQ ID NO: 109).

TTGGCCCATTGCATACTTGTATCCATATCATAATATGTACATTATTTGGCTCATGTCACATTACC  
GCCATGTTGACATTGATTAGACTAGTTATAATAGTAATCAATTACGGGTCTAGTACAGCCCA  
TATATGGAGTTCCCGTTACATAACTACGGTAATGGCCGCTGGCTGACGCCAACGACCCCCGCC  
CATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGACTTTCCATTGACGTCAATGGGT  
GGAGTATTACGGTAACTGCCACTGGCAGTACATCAAGTGATCATATGCCAAGTACGCCCTATT  
GACGTCAATGACGGTAAATGGCCGCTGGCATTATGCCAGTACATGACCTTATGGGACTTTCTACTT  
GGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTATGCCAGTACATCAATGGCG  
TGATAGCGTTGACTCACGGGATTCCAAGTCTCCACCCATTGACGTCAATGGAGTTGG  
CACAAAATCAACGGGACTTCCAAAATGCTGAACAACCTCCGCCATTGACGCAAATGGCGTAGGC  
GTGTACGGTGGGAGGCTATATAAGCAGAGCTGTTAGTGAACCGTCAGATGCCGGAGACGCCATCC  
ACGCTGTTTGACCTCCATAGAACAGACCGGGACCGATCCAGCCTCCCTGAAGCTTACATGGTACC  
GAGCTGGATCCTGAGAACCTTCAGGGTGAGTCTATGGGACCTTGATGTTTCTTCCCTTCTTCTA  
TGTTAAGTTCATGTCATAGGAAGGGAGAAGTAACAGGGTACACATATTGACCAAATCAGGGTAATT  
GCATTTGTAATTAAAAATGCTTCTTCTTTAATATACTTTGTTATCTTATTCTAAACTTT  
CCCTAATCTCTTCTTCAGGGCAATAATGATACAATGTTATCATGCCCTTGCAACCATTCTAAAGAATA  
ACAGTGATAATTCTGGTTAAGGCAATAGCAATTCTGCATATAAATATTCTGCATATAAATTGTA  
ACTGATGTAAGAGGTTCATATTGCTAATAGCAGCTACAATCCAGCTACATTCTGCTTTATTG  
TTGGATAAGGCTGGATTATTCTGAGTCCAAGCTAGGCCCTTGCTAATCATGTTCATACCTCTTATCT  
TCCTCCCACAGCTCCTGGCAACGTGCTGGCTGTGCTGGCCATCATTGGCAAGCACGTGAGAT  
CTGAATTGGAGATCTGGCGCCGCATGGTGCAGAGCGTAGTATTAGGGGGAGAATTAGATCGAT  
GGGAAAAAATTGGTTAAGGCCAGGGGAAAGAAAAAATTAAATTAAACATATAGTATGGCAAGCAG  
GGAGCTAGAACGATTGCGAGTTAATCCTGGCCTGTTAGAAACATCAGAAGGCTGTAGACAAATACTGGGA  
CAGCTACAACCATCCCTCAGACAGGATCAGAAGAACTTAGATCATTATAATACAGTAGCAACCCCT  
ATTGTTGTCATCAAAGGATAGAGATAAAAGACACCAAGGAAGCTTACAGAAAGATAGAGGAAGGCAAAA  
CAAAGTAAGAAAAAGCACAGCAAGCAGCAGCTGACACAGGACACAGCAATCAGGTCAAGCAAAATTAC  
CCTATAGTGCAGAACATCCAGGGCAAAATGGTACATCAGGCCATATCACCTAGAAACTTTAAATGCATGG  
TAAAAGTAGTAGAAGAGAAGGCTTCAGCCAGAAGTGTACATCCCAGTAGGGAAATCTATAAAAGATGGATAATCTGGGATTAAATAA  
ATAGTAAGAATGTATAGCCCTACAGCATTCTGGACATAAGACAAGGACCAAGGAACCCCTTACAGACT  
ATGTAGACCGATTCTATAAAACTCTAAGAGCCAGCAAGCTTACAAGAGGTAAGGAAATTGGATGACAGA  
AACCTTGGTCCAAAATGCGAACCCAGATTGTAAGACTATTAAAAGCATTGGGACCGAGCGACA  
CTAGAAGAAATGATGACAGCATGTCAGGGAGTGGGGACCCGCCATAAGCAAGAGGTTTGGCTGAAG  
CAATGAGCCAAGTAAACAACTCCAGCTACCCATAATGATACAGAAAGGCAATTAGGAACCAAAGAAC  
TGTAAAGTGTTCATAAGGGCACATAGCCAAAATTGAGGGCCCTAGGAAAGGGC  
TGGTGGAAATGTGAAAGGAAGGACACCAAAATGAAAGATTGTACTGAGAGACAGGCTAATTGGGAG  
AGATCTGGCCTTCCCACAAGGGAGGCCAGGGAAATTCTCAGAGCAGACAGGCCAACAGCCCCACC  
AGAAGAGAGCTTCAGGTTGGGGAGAGACACAAACTCCCTCTCAGAAGCAGGAGGCCATAGACAAGGAA  
CTGTATCCTTAGCTCCCTCAGATCACTCTTGGCAGCGACCCCTCGTACAATAAGATAGGGGCA  
ATTAAAGGAAGCTCTATTAGATACAGGAGCAGATGATACAGTATTAGAAGAAATGAATTGCCAGGAAGA  
TGGAAACCAAAATGATAGGGGAATTGGAGGTTTATCAAAGTAAGACAGTATGATCAGATACTCATAG  
AAATCTGGGACATAAGCTATAAGGTACAGTATTAGTAGGACCTACACCTGTCAACATAATTGGAAAGAAA  
TCTGTTGACTCAGATTGGCTGCACATTAAATTCTCATTAGTCTATTGAGACTGTACCGATAAATT  
AAGCCAGGAATGGATGCCAAAAGTTAAACAATGCCATTGACAGAAGAAAAAATTAAAGCATTAGTAG  
AAATTGTACAGAAATGGAAAAGGAAGGAAAATTCTCAAACAAATTGGGCTGAAAATCCATACAAACTCC  
AGTATTGCAATAAGAAAAAGACAGTACTAAATGGAGAAAATTAGTAGATTTCAGAGAACCTTAATAAG  
AGAACACTCAAGATTCTGGGAAGTTCATATTAGGAATACCAACATCCTGCAGGGTTAAAACAGAAAAAATCAG  
TAACAGTACTGGATGTGGCGATGCATATTTCAGTTCCCTTAGATAAGACTTCAGGAAGTATACTGC  
ATTACCATACCTAGTATAAACATGAGACACCAGGGATTAGATATCAGTACAATGTGCTTCCACAGGGA  
TGGAAAGGATCACCAGCAATATTCCAGTGTAGCATGACAAAATCTTAGAGCCTTTAGAAAACAAAATC

Table 21 (continued) Nucleotide sequence of plasmid pLP1 (SEQ ID NO: 109).

CAGACATAGTCATCTCAATAACATGGATGATTGTATGAGGATCTGACTTAGAAATAGGGCAGCATAG  
AACAAAAATAGAGGAACGTGAGACAACATCTGTTGAGGTGGGATTACACCAGACAAAAACATCAG  
AAAGAACCTCCATTCTTGGATGGTTATGAACCTCCATCTGATAAATGGACAGTACAGCCTATAGTGC  
TGCCAGAAAAGGACAGCTGGACTGCAATGACATACAGAAATTAGTGGGAAAATTGAATTGGGCAAGTCA  
GATTATGCAAGGATTAAAGTAAGGCAATTATGTAACCTTCTAGGGAAACCAAAGCACTAACAGAAGTA  
GTACCACTAACAGAAGCAGAGCTAGAACCTGGCAGAAAACAGGGAGATTCTAAAAGAACCGGTACATG  
GAGTGTATTATGACCCATCAAAAGACTTAATAGCAGAAATACAGAAGCAGGGCAAGGCCATGGACATA  
TCAAATTATCAAGAGCCATTTAAAATCTGAAAACAGGAAAGTATGCAAGAATGAAGGGTGCCACACT  
AATGATGTGAAACAATTAAACAGAGGCAGTACAAAAAATGCCACAGAAAGCATAGTAATATGGGAAAGA  
CTCCTAAATTAAATTACCCATACAAAAGGAAACATGGGAGCATGGTGGACAGAGTATTGGCAAGCCAC  
CTGGATTCTGAGTGGAGTTGTCAATACCCCTCCCTAGTGAAGTTATGGTACCAAGTTAGAGAAAGAA  
CCCATATAAGGAGCAGAAACTTCTATGTAGATGGGCAGCCAATAGGGAAACTAAATTAGGAAAGCAG  
GATATGTAACGTGACAGAGGAAGACAAAAAGTTGTCCCCCTAACGGACACAACAAATCAGAAGACTGAGTT  
ACAAGCAATTCACTAGCTTGCAGGATTGGGATTAGAAGTAACATAGTGAACAGACTCACAAATATGCA  
TTGGGAATCATTCAAGCACAACCAGATAAGAGTGAATCAGAGTTAGTCAGTCAAATAATAGAGCAGTTAA  
TAAAAAAGGAAAAGTCTACCTGGCATGGTACAGCACACAAAGGAATTGGAGGAATGAACAAGTGA  
TAAATTGGTCAGTGTGGAAATCAGGAAAGTACTATTAGATGGAATAGATAAGGCCAAGAAGAACAT  
GAGAAATATCACAGTAATTGGAGAGCAATGGCTAGTATTAAACCTACCGACTGTAGTAGCAAAGAAA  
TAGTAGGCCAGCTGTGATAAATGTCAAGCTAAAAGGGGAAGCCATGCATGGACAAGTAGACTGTAGGCCAGG  
AATATGGCAGCTAGATTGTACACATTAGAAGGAAAAGTTATCTGGTAGCAGTTATGTAGGCCAGTGG  
TATATAGAAGCAGAAGTAATTCCAGCAGAGCACAGGGCAAGAACAGCATACTCCTCTAAAATTAGCAG  
GAAGATGCCAGTAAAACAGTACATACAGACAATGGCAGCAATTTCACCGACTACAGTTAAGGCCGC  
CTGTTGGTGGCGGGGATCAAGCAGGAATTGGCATCCCTACAATCCCCAAAGTCAGGAGTAATAGAA  
TCTATGAATAAGAATTAAAGAAAATTAGGACAGGTAAGAGATCAGGCTGAACATCTTAAGACAGCAG  
TACAAATGCCAGTATTCCACAAATTAAAAGAAAAGGGGGATTGGGGGTACAGTGCAGGGGAAAG  
AATAGTAGACATAATAGCAACAGACATACAAACTAAAGAATTACAAAACAAATTACAAAATTCAAAT  
TTTCGGGTTTATTACAGGGACAGCAGAGATCCAGTTGGAAAGGACCAGCAAAGCTCTCTGGAAAGGTG  
AAGGGCAGTAGTAATACAAGATAATAGTGCATAAAAGTAGTGCAGAACAGAAAAGCAAGATCATCAG  
GGATTATGGAAAACAGATGGCAGGTGATGTTGTGGCAAGTAGACAGGATGAGGATTAACACATGGAA  
TTCGGAGCGGCCGAGGAGCTTGTCTGGTTCTGGGAGCAGCAGGAAGCACTATGGCGCAGCG  
TCAATGACGCTGACGGTACAGGCCAGACAATTATTGTCTGGTATAGTGCAGCAGCACAAATTGCTGA  
GGGCTATTGAGCGAACAGCATCTGTCAGTCAGTCTGGGCATCAAGCAGCTCCAGGCAAGAAT  
CCTGGCTGTGGAAAGATACCTAAAGGATCAACAGCTCTGGGATTGGGGTCTGGAAAACACTCATT  
TGCACCACTGCTGTGCTTGGATGCTAGTTGGAGTAATAATCTCTGGAACAGATTGGAAATCACACGA  
CCTGGATGGAGTGGACAGAGAAATTACAAGCTCCGCGGAATTACCCACCAAGTGCAGG  
CTGCCTATCAGAAAGTGGTGGCTGGCTAATGCCCTGGCCCACAAGTATCACTAACGCTCGCTTCT  
TGCCTGCCAATTCTATTAAAGGTTCTTGTCTGCTTAAGTCAACTACTAAACTGGGGATATTATGAA  
GGGCTTGAGCATCTGGATTCTGCTTAATAAAAACATTATTTCATTGCAATGATGTTAGGAAATT  
TTCTGAATATTAAAGGAAATGTGGGAGGTCAAGTGCATTAAAACATAAAGAAATGAAGAGCTA  
GTTCAAACCTTGGAAAATACACTATCTAAACTCCATGAAAGAAGGTGAGGCTGCAAACAGCTAATG  
CACATTGGCAACAGCCCTGATGCCTATGCCCTATTCACTCAGAAAAGGATTCAAGTAGAGGCTTGA  
TTTGGAGGTTAAAGTTGCTATGCTGTTACATTACTTATTGTTAGCTGCTCTCATGAATGTCT  
TTTCACTACCCATTGCTTATCTGCATCTCAGCTTGAACCTCACTCAAGTCTCTGCTTAGAGATA  
CACCTTCCCTGAAGTGTCTTCCATGTTACGGCAGATGGTTCTCCTCGCTGGCCACTCAGCC  
TTAGTTGTCTGTTGCTTATAGAGGTCACTTGAGAAGAAGAAAACAGGGGGCATGGTTGACTGTCC  
TGTGAGCCCTTCTTCCCTGCCTCCCCACTCACAGTGCACCGGAATCCCTGACATGGCAGTCTAGCACT  
AGTGCAGGCCAGATCTGCTTCCCGTCACTGACTCGCTGCCTCGGCTCGGCTGCCAGCGGT  
ATCAGCTCACTCAAAGGCCGTAATACGGTTATCCACAGAACAGGGATAACGCAGGAAAGAACATGTGA  
GCAAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCTTTCCATAGGCTCCGCC  
CCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCAGAACCCGACAGGACTATAAAGATA  
CCAGCGTTCCCCCTGGAAGCTCCCTGTCGCTCTGCTCGGCTTACCGGATACCTG  
TCCGCCTTCTCCCTCGGGAAAGCGTGGCGCTTCTCATAGTCACGCTGTAGGTATCTCAGTTGGTGT  
AGTCGTTGCTCCAAGCTGGCTGTGTCAGAACCCCCGTTCAAGCCCGACCGCTGCCCTATCCGG  
TAACATCGTCTGAGTCCAACCCGGTAAGACACGACTTATGCCACTGGCAGCAGCCACTGGTAACAGG  
ATTAGCAGAGCGAGGTATGTAGGGCTACAGAGTTCTGAAGTGGTGGCTAACTACGGCTACACTA

Table 21 (continued) Nucleotide sequence of plasmid pLP1 (SEQ ID NO: 109).

GAAGAACAGTATTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTCGGAAAAAGAGTTGGTAGCTCTTG  
ATCCGGCAAACAAACCAACCGCTGGTAGCGGTGGTTTTGCAAGCAGCAGATTACGCGCAGAAAA  
AAAGGATCTAAGAAGATCCTTGATCTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTACGTT  
AAGGGATTTGGTCATGAGATTATCAAAAGGATCTTCACCTAGATCCTTTAAATTAAAAATGAAGTTT  
TAAATCAACTAAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCT  
ATCTCAGCGATCTGCTATTGCGTCATCCATAGTTCGCTGACTCCCCGTCGTGTAGATAACTACGATAC  
GGGAGGGCTTACCATCTGGCCCAGTGCATGCAATGATACCGCGAGACCCACGCTCACCGCTCCAGATTT  
ATCAGCAATAAACCAAGCCAGCCAGGGCGAGCGCAGAAGTGGCTCTGCAACTTTATCCGCCTCCATC  
CAGTCTATTAAATTGTTGCCGGAGCTAGAGTAAGTAGTTGCCAGTTAATAGTTGCGCAACGTTGTTG  
CCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGGTATGGCTTCATTAGCTCCGGTTCCAACG  
ATCAAGGCAGTTACATGATCCCCATGTTGCAAAAAAGCGGTTAGCTCCTTCGGCTCCGATCGTT  
GTCAGAAGTAAGTTGCCGCAGTGTATCACTCATGGTTATGGCAGCAGTCATAATTCTCTTACTGTCA  
TGCCATCCGTAAGATGCTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAAATAGTGATGCG  
GCGACCGAGTTGCTCTGCCGGCGTCAATACGGATAATACCGGCCACATAGCAGAACTTTAAAAGTG  
CTCATCATTGGAAAAGCTTCTCGGGCGAAAACCTCAAGGATCTTACCGCTGTTGAGATCCAGTTGCA  
TGTAACCCACTCGCACCCAACTGATCTTCAGCATTTTACTTCAACCAGCGTTCTGGGTGAGCAAA  
AACAGGAAGGCAAAATGCCGCAAAAAGGAATAAGGGCGACAGGAAATGTTGAATACTCATACTCTTC  
CTTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCATGAGCGGATAACATATTGAATGTATTT  
AGAAAAATAACAAATAGGGTTCCGCGCACATTCCCCGAAAAGTGCCACCTGACGGATCCCTGAGG  
GGGCCCATGGCTAGAGGATCCGGCTCGGCCTGCAAAATAAAAAATTAGTCAGCCATGAGC

Please amend Table 22 on pages 446 and 447 as follows:

Table 22: Nucleotide sequence of plasmid pLP2 (SEQ ID NO: 110).

AATGTAGTCTTATGCAATACTCTTAGTCTTGCACATGGTAACGATGAGTTAGCAACATGCCCTACAA  
GGAGAGAAAAAGCACCCTGCATGCCATTGGAGTAAGGTGGTACGATCGTCCTTATTAGGAAGGC  
AACAGACGGCTGACATGGATTGGACGAACCACTGAATTCCGATTGCAGAGATATTGTATTAAAGTGC  
CTAGCTCGATACAATAACGCCATTGACCATTCACACATTGGTGTGCACCTCCAAGCTCGAGCTCGTT  
TAGTGAACCGTCAGATCGCCTGGAGACGCCATCCACGCTGTTTGACCTCCATAGAAGACACCGGGACCG  
ATCCAGCCTCCCCTCGAAGCTAGTCGATTAGGCATCTCTATGGCAGGAAGAAGCAGGGAGACAGCGACGAA  
GACCTCCTCAAGGCAGTCAGACTCATCAAAGCAACCCACCTCCCAATCCGAGGGGA  
CCCGACAGGCCGAAGGAATAGAAGAAGAAGGTGGAGAGAGAGACAGAGACAGATCCATTGATTAGTGA  
ACGGATCCTTAGCACTTATCTGGGACGATCTGGGAGCCTGTGCGGAGCCTGTGCTCTTCAGCTACCAACCGCTTGAGAGA  
CTTACTCTTGATTGTAACGAGGATTGTGAACTCTGGGACGCAGGGGGTGGGAAGCCCTAAATATTGG  
TGGAATCTCCTACAATATTGGAGTCAGGAGCTAAAGAATAGTGTGTTAGCTGCTCAATGCCACAGCTA  
TAGCAGTAGCTGAGGGGACAGATAGGGTTATAGAAGTAGTACAAGAAGCTGGCACTGGCCGTCGTTTA  
CAACGTCGTGATCTGAGCCTGGGAGATCTCTGGCTAAGTAGGAAACCCACTGCTTAAGCCTCAATAAAGC  
TTGCCTTGAGTGCTCAAGTAGTGTGCCCCGTCTGGTGTGACTCTGGTAACTAGAGATCAGGAAAAC  
CCTGGCGTTACCCAACTTAATGCCCTGCAAGCACATCCCCCTTCGCCAGCTGGCGTAATAGCGAAGAGG  
CCCGCACCAGTCGCCCTCCAAACAGTTGCCAGCCTGAATGGCGAATGGCCCTGATGCGGTATTTCT  
CCTTACGCGATCTGTGCGGTATTCACACCGCATACTGCAAAGCAACCATAGTACGCCCTGTAGCGCG  
CATTAAGCGCGGGGGTGTGGTGTACCGCAGCGTACACTTGCAGCGCCCTAGCGCCCG  
TCCTTCGCTTCTCCCTTCTGCCACGTTGCCAGGGCTTCCCGTCAAGCTCTAAATCGGGG  
CTCCCTTAGGGTTCCGATTTAGTGTCTTACGGCACCTCGACCCAAAAACTGATTTGGGTATGGTT  
CACGTAGTGGGCCATCGCCCTGATAGACGGTTTCGCCCCTTGACGTTGGAGTCCACGTTCTTAATAG  
TGGACTCTTGTCCAAACTGGAACAAACACTCAACCCATCTCAGGCTATTCTTTGATTTATAAGGGATT  
TTGCCGATTCGGCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTAAACGCAATTAAACAAAA  
TATTAACGTTACAATTATGGTCACTCTCAGTACAATCTGCTCTGATGCCGATAGTTAACGCC  
CCGACACCCGCAACACCCGCTACGCCCTGACGGGCTTGTGCTCCGGCATCGCTTACAGACAA  
GCTGTGACCGTCTCCGGGAGCTGCATGTGTCAGAGGTTTCACCGTCATACCGAACGCGCAGACGAA  
AGGGCCTCGTACGCCATTTCAGGTTAACGCAATTAAATGGTTCTAGACGTAGGTGG  
CACTTTGCCGGAAATGTGCCGAAACCCATTGGTTATTTCTAAATACATTCAAATATGTATCCG  
CTCATGAGACAATAACCCGATGAAATGCTTCAATAATATTGAAAAGGAAGAGTATGAGTATTCAACATT  
TCCTGTCGCCCTTATCCCTTTTGCGGCATTTGCCCTCTGTTTGCTCACCCAGAACGCTGGT  
GAAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGTTACATGAACTGGATCTAACAGCG  
AAAGATCCTTGAGAGTTGCCCGAAGAACGTTTCAATGAGCAGTAAAGTTCTGCTATGTG  
GCGCGGTATTATCCGTATTGACGCCGGCAAGAGCAACTCGGTCGCCGATACACTATTCTCAGAATGA  
CTTGGTTGAGTACTCACCAGTCACAGAAAAGCATCTACGGATGGCATGACAGTAAGAGAATTATGAGT  
GCTGCCATAACCATGAGTGATAAACACTGCCAACCTACTCTGACAAACGATCGGAGGACCGAAGGAGC  
TAACCGCTTTTGCAACATGGGGATCATGTAACCTGCCCTGATCGTGGGAACCGGAGCTGAATGA  
AGCCATACCAAACGAGCGTGACACCACGATGCCCTGAGCAATGGCAACACGTTGCAGAACACTATT  
ACTGGCGAACACTTACTCTAGCTTCCGCCAACAAATTAAATAGACTGGATGGAGGGCGATAAAAGTTGCAG  
GACCACTCTCGCCTGCCCTCCGGCTGGTTATTGCTGATAAAATCTGGAGCCGGTGAACGCTGG  
GTCCTCGCGGTATCTGAGCAGTGGGCCAGATGGTAAGCCCTCCGATCGTAGTTATCTACACGACG  
GGGAGTCAGGCAACTATGGATGAACGAAATAGACAGATCGCTGAGATAGGTGCTCACTGATTAAGCATT  
GGTAACGTGTCAGACCAAGTTACTCATATAACTTTAGATTGATTTAAACCTCATTTAAATTAAAAG  
GATCTAGGTGAAGATCCTTTGATAATCTCATGACCAAAATCCCTAACGTGAGTTTCGTTCACTGA  
GCGTCAGACCCGTAGAAAAGATCAAAGGATCTTCTGAGATCCTTTCTGCGCGTAATCTGCTGCT  
TGCAAAACAAAAACCCACCGCTACCGAGCGTGGTTGCGGATCAAGAGCTACCAACTCTTTCC  
GAAGGTAACGTGCTTCAGCAGAGCGCAGATACCAAAATACTGTTCTAGTGTAGCCGTAGTTAGGCCAC  
CACTTCAGAACACTCTGAGCAGGCCCTACATACCTCGCTCTGCTAACCTGTTACCAAGTGGCTGCTGCCA  
GTGGCGATAAGTCGTGCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCCAGCGGTGG  
CTGAACGGGGGGTCTGACACAGCCCAGCTGGAGCGAACGACCTACACCGAAGCTGAGATACCTACAG  
CGTAGCTATGAGAAAGGCCACGCTCCGAAGGGAGAAAGCGGAGCAGGTATCCGTAAGCGGCAGGG  
TCGGAACAGGAGAGGCCACGAGGGAGCTTCAAGGGGAAACGCCCTGGTATCTTATAGTCCTGCGGGTT

Table 22 (continued) Nucleotide sequence of plasmid pLP2 (SEQ ID NO: 110).

TCGCCACCTCTGACTTGAGCGTCGATTTTGATGCTCGTCAGGGGGGGAGCCTATGGAAAAACGCC  
AGCAACGCAGCCCTTTTACGGTCTGGCCTTTGCTGGCCTTTGCTCACATGTTCTTCCTGCGTTAT  
CCCCCTGATTCTGTGGATAACCGTATTACCGCCTTGAGTGAGCTGATACCGCTGCCAGCCGAACGAC  
CGAGCGCAGCGAGTCAGTGAGCGAGGAAGACGCCAATACGCAAACGCCCTCTCCCCGCCGCT  
TGGCCGATTCAATTAAATGCAGCTGGCACGACAGGTTCCGACTGGAAAGCGGGCAGTGAGCGCAACGCAA  
TTAATGTGAGTTAGCTCACTCATAGGCACCCCAGGCTTACACTTATGCTCCGGCTCGTATGTTGTG  
TGGAAATTGTGAGCGGATAACAATTTCACACAGGAAACAGCTATGACATGATTACGAATTGATGTACGGG  
CCAGATATAACCGTATCTGAGGGACTAGGGTGTGTTAGGCAGAAAGCGGGCTCGGTTGTACGCCGT  
TAGGAGTCCCTCAGGATATAGTAGTTCGCTTTGCATAGGGAGGGGA

Please amend Table 23 on pages 448 and 449 as follows:

Table 23: Nucleotide sequence of plasmid pLP/VSVG (SEQ ID NO: 111).

TTGGCCCATTGCATACGTTGTATCCATATCATAATATGTACATTATATTGGCTCATGTCCAACATTACC  
GCCATGTTGACATTGATTATTGACTAGTTATTAAATAGTAATCAATTACGGGGTCAATTAGTTCATAGCCCA  
TATATGGAGTTCCCGCTTACATAACTTACGGTAAATGGCCCGCTGGCTGACCGCCCCAACGACCCCCGCC  
CATTGACGTCATAATGACGTATGTTCCCAGTAAACGCCAATAGGGACTTCCATTGACGTCAATGGGT  
GGAGTATTACGGTAAACTGCCACTTGGCAGTACATCAAGTGTATCATGCCAAGTACGCCCTATT  
GACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCAGTACATGACCTTATGGGACTTCCCTACTT  
GGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGTGCGGTTGGCAGTACATCAATGGCG  
TGGATAGCGGTTGACTCACGGGATTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTGGTTGG  
CACAAAATCAACGGGACTTCCAAAATGTCGAACAACCTCCGCCATTGACGCAAATGGGCGGTAGGC  
GTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTAGTGAACCGTCAGATGCCCTGGAGACGCCATCC  
ACGCTGTTTGACCTCCATAGAACAGACCGGGACCGATCCAGCCTCCCTCGAAGCTACATGTGGTACC  
GAGCTCGGATCCTGAGAACTTCAGGGTGAAGTCTATGGGACCCCTGATGTTTCTTCCCTTCTTCTA  
TGGTTAAGTCATGTCATAGGAAGGGAGAAGTAACAGGGTACACATATTGACCAAATCAGGGTAATT  
GCATTGTAATTAAAAATGTTCTTTAATATACTTTTGTATCTTATTCTAATACTTT  
CCCTAATCTCTTCTTCAGGGCAATAATGATAATGTCATGCCCTTGTGACCAATTCTAAAGAATA  
ACAGTGATAATTCTGGGTTAAGGCAATAGCAATTCTGCATATAAATATTCTGCATATAAATTGTA  
ACTGATGTAAGAGGTTCATATTGCTAATAGCAGCTACAATCCAGCTACCAATTCTGCTTTATTG  
TTGGGATAAGGCTGGATTATTCTGAGTCCAAGCTAGGCCCTTGCTAATCATGTTCATACCTCTTATCT  
TCCTCCCACAGCTCCTGGCAACGTCGTGGCTGTGCTGGGCCATCACTTGGCAAAGCACGTGAGAT  
CTGAATTCTGACACTATGAAGTGCCTTTGACTTAGCCTTTTATTCAATTGGGTAATTGCAAGTTCA  
CCATAGTTTCCACACAACCAAAAGGAAACTGGAAAATGTCCTCTAATTACCAATTATTGCCCGTC  
AAGCTCAGATTAAATTGGCATAATGACTTAATAGGCACAGCCTTACAAGTCAAATGCCAAGAGTCAC  
AAGGCTATTCAAGCAGACGGTGGATGTCATGCTCCAAATGGGTCACTACTTGTGATTCCGCTGGT  
ATGGACCGAAGTATATAACACATTCCATCGATCCTCACTCCATCTGTAGAACAAATGCAAGGAAAGCAT  
TGAACAAACGAAACAAGGAACTTGGCTGAATCCAGGCTCCCTCTCAAAGTTGTGGATATGCAACTGTG  
ACGGATGCCGAAGCAGTGAATTGTCAGGTGACTCCTCACCATGTGCTGGTTGATGAATACACAGGAGAAT  
GGGTTGATTCAAGTTCATCAACGGAAAATGCAATTACATATGCCCACTGTCCATAACTCTAAC  
CTGGCATTCTGACTATAAGGTCAAAGGGCTATGTGATTCTAACCTCATTCCATGGACATCACCTCTC  
TCAGAGGACGGAGAGCTATCCCTGGGAAAGGAGGGCACAGGGTTCAGAAGTAACTACTTGTCTTATG  
AAACTGGAGGCAAGGCCCTGCAAATGCAATTACTGCAAGCATTGGGAGTCAGACTCCATCAGGTGCTG  
GTCAGAGATGGCTGATAAGGATCTTGTGCTGCAGCAGATTCCCTGAATGCCAGAAGGGTCAAGTATC  
TCTGCTCCATCTCAGACCTCAGTGGATGTAAGTCTAACCTCAGGACGTTGAGAGGATCTGGATTATT  
TCTGCCAAGAAACCTGGAGCAAATCAGAGCGGGCTTCCAATCTCCAGTGGATCTCAGCTATCTG  
TCTCTAAACCCAGGAACCGGTCTGCTTCAACCATAATCAATGGTACCCCTAAATACTTGAGACCAGA  
TACATCAGAGTCGATATTGCTGCTCCATTCTCTCAAGAATGGCGGAATGATCAGTGGAACTACCACAG  
AAAGGGAACTGTGGGATGACTGGGCACCATATGAAGACGTGGAAATTGGACCCAATGGAGTTCTGAGGAC  
CAGTTCAGGGATATAAGTTCTTATACATGATTGGACATGGTATGTTGACTCCGATCTCATTAG  
TCAAAGGCTCAGGTGTTGCAACATCCTCACATTCAAGACGCTGCTCGCAACTCCCTGATGATGAGAGTT  
TATTTTTGGTGTACTGGCTATCCAAAATCCAATCGAGCTGTAGAAGGTTGGTCACTAGTTGGAA  
AAGCTCTATTGCTCTTTTCTTATCATAGGGTTAATCATTGGACTATTCTGGTTCTCCGAGTTGG  
ATCCATCTTGCTTAAATTAAAGCACACCAAGAAAAGACAGATTCTCATGTTGGACCAATCAACTTGTG  
TTGGAAAGTAACTCAAATCCTGCAACACAGATTCTCATGTTGGACCAATCAACTTGTGATACCATGC  
TCAAAGGCCCTCAATTATATTGAGTTTAAATTATGAAAAAAGGGAAACGGAAATTCA  
CACCAGTGCAGGCTGCCATTGCAACAGGCTGGCTGGCTAATGCCCTGGCCACAAAGTATCAGT  
AGCTCGCTTCTGCTGCTCAATTCTATTAAAGGTTCTTGTGCTTAAGTCAAACACTAAACTG  
GGATATTATGAAGGGCCTTGAGCATCTGGATTCTGCTTAATAAAAACATTATTTCATGCAATGATG  
TATTTAAATTATTTCTGAATATTCTACTAAAAAGGGAAATGTGGGAGGTCAGTGCATTAAAACATAAAGA  
AATGAAGAGCTAGTTCAAACCTGGAAAATACACTATATCTTAAACTCCATGAAAGAAGGTGAGGCTGC  
AAACAGCTAATGCACATTGGCAACAGCCCTGATGCCATTGCCCTTATTCTCAGAAAAGGATTCAA  
GTAGAGGCTGATTGGAGGTTAAAGTTGCTATGCTGATTACATTACTATTGTTAGCTGTCC  
TCATGAATGCTTTCACTACCCATTGCTTATCCTGCATCTCAGCCTTGACTCCACTCAGTTCTCTT

Table 23 (continued) Nucleotide sequence of plasmid pLP/VSVG  
(SEQ ID NO: 111).

GCTTAGAGATACCACCTTCCCTGAAGTGTCTTCCATGTTTACGGCGAGATGGTTCTCCTCGCCT  
GGCCACTCAGCCTTAGTTGTCTGTCTTATAGAGGTCTACTGAAGAAGGAAAAACAGGGGGCATG  
GTTTGAUTGTCTGTGAGCCTTCTTCCCTGCCTCCCCACTCACAGTGACCCGGAATCCCTCGACATGG  
CAGTCTAGCACTAGTGCAGGCCGAGATCTGCTTCTCGCTCACTGACTCGCTCGCTCGGTCTCGGCT  
GCGGCGAGCGGTATCAGCTACTCAAAGCGGTAATACGGTTATCCACAGAAATCAGGGGATAACGCAGGA  
AAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAGGCCGTTGCTGGCTTTTCC  
ATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGG  
ACTATAAAGATAACCAGCGTTCCCGCTTGGAAAGCTCCCTCGTGCCTCTCTGTCCGACCCCTGCCGTT  
ACCGGATACTGTCCGCCCTTCTCCCTCGGGAAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATC  
TCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGACGAACCCCCGTTCAGCCGACCGCTG  
CGCCTTATCCGTAACTATCGTCTGAGTCCAACCCGTAAGACACGACTTATGCCACTGGCAGCAGCC  
ACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTGAAGTGGTGGCCTAAGT  
ACGGCTACACTAGAAGAACAGTATTGGTATCTGCCTCTGCTGAAGCCAGTTACCTCGGAAAAAGAGT  
TGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTGTGCAAGCAGCAGATT  
ACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTGATCTTCTACGGGGCTGACGCTCAGTGGAACG  
AAAACCTACGTTAAGGGATTGGTATGAGATTATCAAAAGGATCTCACCTAGATCCTTAAATTAA  
AAAATGAAGTTTAAATCAATCTAAAGTATATGAGTAAACTGGTCTGACAGTTACCAATGCTTAATC  
AGTGAGGCACCTATCTCAGCGATCTGCTATTCGTTCATCCATAGTTGCCGTGACTCCCCGTCGTGAGA  
TAACACTACGATACGGGAGGGCTTACCATCTGGCCCAGTGCATGATACCGCGAGACCCACGCTCACC  
GGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGAAAGGGCCAGCGCAGAAGTGGTCTGCAACTTTA  
TCCGCCTCCATCCAGTCTATTAAATTGGTCCGGGAAGCTAGAGTAAGTAGTTGCCAGTTAATAGTTGC  
GCAACGTTGTTGCCATTGCTACAGGCATCGTGTGTCACGCTCGTGTGGTATGGCTTCATTAGCTC  
CGGTTCCAAACGATCAAGGCAGGTTACATGATCCCCATGTTGCAAAAAAGCGGTTAGCTCTTCGGT  
CCTCCGATCGTTGTCAGAAGTAAGTTGGCCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAATT  
CTCTTACTGTCATGCCATCCGTAAGATGCTTTCTGACTGGTAGACTCAACCAAGTCATTCTGAGA  
ATAGTGTATGCGGCACCGAGTTGCTCTGCCCGCGTCAATACGGATAATACCGGCCACATAGCAGA  
ACTTTAAAGTGTCTCATGGAAAACGTTCTCGGGCGAAAACCTCTCAAGGATCTTACCGCTGTTGA  
GATCCAGTTGATGTAACCCACTCGTCACCCAACTGATCTTCAGCATTTTACTTCAACCGCGTTTC  
TGGGTGAGCAAAACAGGAAGGAAAATGCCGAAAAAAGGAATAAGGGCGACACGAAATGTTGAATA  
CTCATACTCTCCTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCATGAGCGGATAACATAT  
TTGAATGTATTAGAAAATAACAAATAGGGTTCCCGCGCACATTCCCCGAAAAGTGCCACCTGACGG  
GATCCCCCTGAGGGGGCCCCATGGGCTAGAGGATCCGGCTCGGCCTCGCATAAATAAAAAAAATTAGT  
CAGCCATGAGC

Please amend Table 28 on pages 450 and 451 as follows:

Table 28: Nucleotide sequence of plasmid pcDNA™6.2/V5-DEST (SEQ ID NO: 112).

GACGGATCGGGAGATCTCCGATCCCCTATGGTGCACTCTCAGTACAATCTGCTCTGATGCCGCATAGTT  
AAGCCAGTATCTGCTCCCTGCTTGTGTTGGAGGTCGCTGAGTAGTGCAGCAGCAAAATTAAAGCTACA  
ACAAGGCAAGGCTTGACCGACAATTGATGAAGAATCTGCTTAGGGTTAGGCCTTGCCTGCTCGCG  
ATGTACGGGCCAGATATAACGCGTTGACATTGATTATGACTAGTTATTAAAGTAATCAATTACGGGGTC  
ATTAGTTCATAGCCCATATATGGAGTTCCGCTTACATAACTTACGGTAAATGGCCCGCTGGCTGACCG  
CCCAACGACCCCCGCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCC  
ATTGACGTCAATGGTGGAGTATTACGGTAAACTGCCACTTGGCAGTACATCAAGTGTATCATATGCC  
AAGTACGCCCTATTGACGTCAATGACGTAAATGGCCGCCTGGCATTATGCCAGTACATGACCTTA  
TGGGACTTCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTATGCGGTTTGGC  
AGTACATCAATGGCGTGGATAGCGGTTGACTCACGGGATTCCAAGTCTCCACCCATTGACGTCAA  
TGGGAGTTGTTGGCACCAAAATCAACGGGACTTCCAAAATGTCGTAACAACCTCGCCCCATTGACG  
CAAATGGCGGTAGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCTGGCTAACTAGAGAACCA  
CTGCTTACTGGCTTATCGAAATTAAACGACTCACTATAGGGAGACCAAGCTGGCTAGTTAAGCTATCA  
ACAAGTTGTACAAAAAAGCTGAACGAGAAACGTAAGTATATAATCAATATATTAAATTAGATT  
TGCATAAAAAACAGACTACATAACTGTAAAACACAATATCCAGTCAGTCAACTATGAATCAACTACTAGA  
TGGTATTAGTACCTGTAGTCGACCGACAGCCTCCAAATGTTCTCGGGTATGCTGCCAACTTAGTCG  
ACCGACAGCCTCCAAATGTTCTCAACGGAATCGCTGATCCAGCCTACTCGCTATTGCTCTCAAT  
GCCGTATTAATCATAAAAAGAAAATAGAAAAAGAGGTGCGAGCCTTGTGTGACAAAATAAAA  
CATCTACCTATTCATACGCTAGTGTCAAGTCCCTGAAAATCATCTGCATCAAGAACAAATTCAACT  
CTTATACTTTCTCTTACAAGTCGTCGGCTCATCTGGATTTCAAGCCTCTATACTTACTAAACGTGAT  
AAAGTTCTGTAAATTCTACTGTATCGACCTGCAGACTGGCTGTGATAGGGAGCCTGACATTATATT  
CCCCAGAACATCAGGTTATGGCGTTTGTGTCATTTCGCGGTGGCTGAGATCAGCCACTTCTCCC  
CGATAACGGAGACCGGCACACTGGCCATATCGGTGGTCATCATGCCAGCTTCAATCCGATATGCAC  
CACCGGGTAAAGTCAGGGAGACTTTACTGTACAGCAGACGTGCACTGCCAGGGGATCACCACCGT  
CGCCCGGGCGTGTCAATAATATCACTCTGTACATCCACAAACAGCATAACGGCTCTCTTTATAGG  
TGTAAACCTTAAACTGCATTCACCAAGTCCCTGTCAGCAAAAGAGCGTTCAATTAAACCC  
GGCGACCTCAGCCATCCCTCTGATTTCCGCTTCCAGCGTTCGGCACCGACAGCACGGCTTCAATT  
CTGCATGGTTGTGCTTACCAAGACGGAGATATTGACATCATATATGCCAGTCAACTGATAGCTGTCG  
TGTCAACTGTCACTGTAATACGCTGCTCATAGCACACCTCTTTGACATACTTCCGGTATACATATCA  
GTATATATTCTTACCGCAAAATCAGCGCAAATACGCAACTGTTATCTGGCTTTAGTAAGCCGG  
ATCCACGCCATTACGCCCGCCCTGCCACTCATCGCAGTACTGTTGTAATTCAATTACGATTCTGCCGAC  
ATGGAAAGCCATCACAGACGGCATGATGAACCTGAATGCCAGCGCATCAGCACCTTGCGCTTGC  
TAATATTGCCCATGGTAAAACGGGGCGAAGAAGTTGTCATATTGCCACGTTAAATCAAAACTGG  
TGAACACTCACCCAGGGATTGGCTGAGACGAAAACATATTCTCAATAAACCTTAGGGAAATAGGCCAG  
GTTTCAACCGTAACAGCCACATCTGCAATATATGTTAGAAACACTGCCGAAATCGTGTGGTATTCA  
CTCCAGAGCGATAAAACGTTCACTGTCATGGAAAACGGTGTAAACAAGGGTGAACACTATCCCATA  
TCACCCAGCTCACCGTCTTCATTGCCATACGGAATTCCGGATGAGCATTCACTAGGCCGGCAAGAATGTG  
AATAAAGGCCGATAAAACTTGTGCTTATTTCATTCCAGGTCTTAAAAGGCCGTAATATCCAGCTGA  
ACGGTCTGGTTAGGTACATTGAGCAACTGACTGAATGCCCTAAATGTTCTTACGATGCCATTGGG  
ATATATCAACGGTGGTATATCCAGTGATTTTTCTCCATTAGCTCTTAGCTCTGAAAATCTGCA  
TAACTCAAAAAAATACGCCCGGTAGTGATCTTATTCTCATTATGGTAAAGTGGACCTTACGTGCCGA  
TCAACGTCTCATTTGCCAAAAGTTGGCCCAGGGCTCCCGGTATCAACAGGGACACCAGGATTATT  
ATTCTGCGAAGTGTCTCCGTACAGGTATTATCCGGCAGGCTAAGTGCCTGGGTATGCTGCCAACTT  
AGTCGACTACAGGTCACTAATACCATCTAAGTAGTTGATTCACTAGTGACTGGATATGTTGTTTACAG  
TATTATGTTAGTCTGTTTATGCAAAATCTAATTAAATATATTGATATTATATCATTTACGTTCTC  
GTTCACTCTTCTGTCACAAAGTGGTTGATCTAGAGGGCCCGCTGGCAAGGTAAGCTATCCCTAACCC  
TCTCCCTGGTCTCGATTCTACCGTACCGGTTAGTAATGAGTTAAACGGGGAGGCTAAGTGAACACAG  
GAAGGAGACAATACCGGAAGGAACCGCGCTATGACGGCAATAAAAGACAGAATAAAACGCACGGGTGT  
TGGGTCGTTGTTCAAAACGGGGGTTCCGGTCCCAGGGCTGGCACTCTGTCGATACCCACCGAGACCC  
CATTGGGCCAATACGCCCGCTTCTCCCTTCCCCACCCCAAGTTGGGTGAAGGCCAG  
GGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCCATAGCAGATCTGCGCAGCTGGGCTCTAGGGGTA

Table 28 (continued) Nucleotide sequence of plasmid pcDNATM6.2/V5-DEST  
(SEQ ID NO: 112).

TCCCCACGCCCTGTAGCGGCGATTAAGCGCGGGTGTGGTGGTTACGCGCAGCGTACCGCTACA  
CTTGCAGGCCCTAGCGCCGCTCCTTCGCTTCTCCCTTCGACGGTACGGCACCTCGACCCCAA  
CCCGTCAAGCTAAATCGGGCATCCCTTAGGGTCCGATTAGTCTTACGGCACCTCGACCCCAA  
AAAACTTGATTAGGGTATGGTACGTAGTGGCCATGCCCTGATAGACGGTTTCGCCCTTGACG  
TTGGAGTCCACGTTAAATAGTGGACTCTTGTCCAAACTGGAACAACACTCAACCCATCTCGGTCT  
ATTCTTTGATTATAAGGATTGGGATTTGGGCTATTGGTTAAAAAATGAGCTGATTTAACAAA  
ATTTAACGCGAATTAAATTCTGTGGAATGTGTCAAGTGGAAAGTCCCAGGCTCCCAGCAG  
GCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCAGGCTCCCAGC  
AGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGTCCGCCCTAACCGCCCATC  
CCGCCCTAACCGCCAGTCCGCCATTCTGCCCATGGCTGACTAATTTTTATATGAG  
AGGCCGAGGCCGCTCTGCCCTGAGCTATTCCAGAAGTAGTGGAGGCTTTGGAGGCCTAGGCTT  
TTGAAAAAGCTCCGGAGCTTGATATCCATTTCGGATCTGATCAGCACGTGTTGACAATTATCAT  
CGGCATAGTATATCGGCATAGTATAATCGACAAGGTGAGGAACAAACATGGCAAGCCTTGTCTCA  
AGAAGAATCCACCCTCATTGAAAGAGCAACGGCTACAATCAACAGCATCCCCATCTGAAGACTACAGC  
GTCGCCAGCGCAGCTCTCTAGCGACGGCGCATCTCACTGGTGTCAATGTATATCATTACTGGG  
GACCTTGTGAGAACTCGTGGTGTGGGCACTGCTGCTGCCAGCTGGCAACCTGACTTGTATCGT  
CGGATCGGAAATGAGAACAGGGGATCTTGAGGCCCTGCCAGGGTGGCACAGGTGCTCTCGATCTG  
CATCCTGGGATCAAAGGCATAGTGAAGGACAGTGTGGACAGCCGACGGCAGTGGGATTGTGAATTG  
TGCCCTCTGGTTATGTTGGGAGGGCTAACGACTTCGGCCGAGGAGCAGGACTGACACGTGCTACGAG  
ATTCGATTCCACCGCCCTCTATGAAAGGTTGGCTTCGGAATCGTTCCGGACGCCGGCTGGAT  
GATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTGCCAACCCAACTTGTTTATTGAGCTTATAAT  
GGTACAAATAAGCAATAGCATCACAAATTCAAAATAAGCATTTCACTGCAATTCTAGTTG  
GTTTGTCCAAACTCATCAATGTATCTTATCATGTCGTATACCGTCGACCTCTAGCTAGAGCTTGGCGTA  
ATCATGGTCATAGCTTTCTGTGAAATTGTTATCCGCTACAATTCCACACAAACATACGAGCCGGA  
AGCATAAAGTGTAAAGCCTGGGGCTAACGAGTGTGAGCTAACACTCACATTAAATTGCTGCGCTACTGC  
CCGCTTCCAGTCGGGAAACCTGCGTGCAGCTGCAATTAGAACGCAACGCCAGGGAGAGGGCG  
TTTGCCTGGCGCTCTCCGCTTCGCTACTGACTCGTGCCTGGCTCGTGGCTGGCGA  
GCGGTATCAGCTACTCAAAGGGGTAATACGGTTATCCACAGAACGGGATAACGCAGGAAGAAC  
TGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAGGCCGTTGCTGGCTTTCCATAGGCT  
CCGCCCCCTGACGAGCATCACAAATCGACGCTAACGACTAACGAGGTGGCAAACCCGACAGGACTATAA  
AGATACCAGCGTTCCCTGGAGCTCCCTCGTGCCTCTCGTGTCCGACCTGGCTTACCGGAT  
ACCTGTCCGCCCTTCTCCCTCGGAAGCGTGGCGCTTCTCATAGCTCACGCTGTAGGTATCTCAGTT  
GGTAGGTCGTTCGCTCCAAGCTGGCTGTGTCAGAACCCCCCGTTAGCCGACCGCTGCCCTTA  
TCCGGTAACTATCGTCTTGAGTCCAACCCGTAAGACACGACTTATGCCACTGGCAGCAGCCACTGGTA  
ACAGGATTAGCAGAGCGAGGTATGTTAGGGCTACAGAGTTGAACTGGGCTTAACACTACGGCTA  
CACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTGGAAAAAGAGTTGGTAGC  
TCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTTTTGCAAGCAGCAGATTACGCCAGAA  
AAAAAGGATCTCAAGAAGATCCTTGATCTTCTACGGGTCTGACGCTCAGTGGAAACGAAAACCTCACG  
TTAAGGGATTGGTATGAGATTATCAAAAGATCTCACCTAGATCCTTTAAATTAAAATGAAGT  
TTTAAATCAATCTAAAGTATATGAGTAAACTGGTCTGACAGTTACCAATGCTTAATCACTGAGGCAC  
CTATCTCAGCGATCTGTCTATTGCTCATCCATAGTGTGACTCCCCCTGTGTAGATAACTACGAT  
ACGGGAGGGCTTACCATCTGCCAGTGTGCAATGATACCGCGAGACCCACGCTCACGGCTCCAGAT  
TTATCAGCAATAAACCGCCAGCCGAAGGGCGAGCGCAGAACGGTCTGCAACTTATCCGCCCTCCA  
TCCAGTCTATTAATTGTTGCCGGAAAGCTAGAGTAAGTAGTCTGACAGTTACCAATGCTTAATGTTGCGCAACGTTGT  
TGCCATTGCTACAGGCATCGTGGTGTACGGCTCGTGTGGTATGGCTTCATTAGCTCCGGTTCCCAA  
CGATCAAGGGCAGTTACATGATCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTCGGTCTCGATCG  
TTGTCAGAAGTAAGTGGCCGAGTGTATCACTCATGGTTATGGCAGCAGTGCATAATTCTTACTGT  
CATGCCATCGTAAGATGCTTTCTGTGACTGGTAGTACTCAACCAAGTCATTCTGAGAATAGTGTATG  
CGCGCACCGAGTTGCTTGCCTGGCGTCAATACGGATAATACCGCGCACATAGCAGAACCTTAAAG  
TGCTCATATTGGAAAACGTTCTCGGGCGAAAACCTCAAGGATCTTACCGCTGTGAGATCAGTT  
GATGTAACCACTCGTGCACCCAACTGATCTCAGCATCTTACTTTACCTTACCGCTGTGAGATCAGTT  
AAAACAGGAAGGAAAATGCCGAAAAAGGAATAAGGGCAGACGGAAATGTTGAATACTCATACTCT  
TCCTTTCAATATTGAGCATTATCAGGGTTATTGTCTATGAGCGGATACATATTGAATGTAT  
TTAGAAAAATAACAAATAGGGTTCCGCGCACATTCCCCGAAAAGTGCCACCTGACGTC

Please amend Table 29 on pages 452 and 453 as follows:

Table 29: Nucleotide sequence of plasmid pcDNA™6.2/GFP-DEST (SEQ ID NO: 113).

GACGGATCGGGAGATCTCCGATCCCCTATGGTGCACTCTCAGTACAATCTGCTCTGATGCCGCATAGTT  
AAGCCAGTATCTGCTCCCTGTTGTGTTGGAGGTCGCTGAGTAGTGCGCGAGCAAAATTAAAGCTACA  
ACAAGGCAAGGCTTGACCGACAATTGATGAAGAATCTGCTTAGGGTTAGGCCTTGCCTGCTCGCG  
ATGTACGGGCCAGATATAACGCGTTGACATTGATTATTGACTAGTTATTAAAGTAATCAATTACGGGGTC  
ATTAGTTCATAGCCCATATATGGAGTTCGGCTTACATAACTTACGGTAAATGGCCCCCTGGCTGACCG  
CCCAACGACCCCCGCCATTGACGTCATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCC  
ATTGACGTCATAATGGTGGAGTATTTACGGTAAACTGCCACTTGGCAGTACATCAAGTGATCATATGCC  
AAGTACGCCCTATTGACGTCATAATGACGGTAAATGGCCCGCTGGCATTATGCCAGTACATGACCTTA  
TGGGACTTTCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTATGCCGTTTGGC  
AGTACATCAATGGGCGTGGATAGCGGTTGACTCACGGGATTCCAAGTCTCCACCCATTGACGTCAA  
TGGGAGTTGTTTGGCACCAAATCAACGGGACTTCCAAAATGTCGTAACAACCTCGCCCCATTGACG  
CAAATGGGCGGTAGGCGTGTACGGTGGAGGTCTATAAAGCAGAGCTCTGGCTAAGAGAACCCA  
CTGCTTACTGGCTTATCGAAATTAAACGACTCACTATAGGGAGACCAAGCTGGCTAGTTAAGCTATCA  
ACAAGTTGTACAAAAAGCTGAACGAGAACGTAATGATATAATATCAATATATTAAATTAGATT  
TGCATAAAAAACAGACTACATAACTGTAAAACACAATATCCAGTCACTATGAATCAACTACTTACA  
TGGTATTAGTGACCTGTAGTCGACCGACAGCCTCCAAATGTTCTCGGTGATGCCAACCTAGTCG  
ACCGACAGCCTTCAAATGTTCTCAAACGGAATCGCTATCCAGCCTACTCGCTATTGTCCTCAAT  
GCCGTATTAAATCATAAAAAGAAATAAGAAAAAGAGGTGCGAGCCTTTTTGTGACAAAATAAAAA  
CATCTACCTATTCATATACGCTAGTGTCTAGTCGAAATCATCTGCATCAAGAACAAATTCAAC  
CTTATACTTTCTCTTACAAGTCGTTGGCTCATCTGGATTTCAGCCTCTATACTTACTAAACGTGAT  
AAAGTTTCTGTAAATTCTACTGTATCGACCTGCAGACTGGCTGTATAAGGGAGCCTGACATTATATT  
CCCCAGAACATCAGGTTAATGGCGTTTTGATGTCATTTCGCGGTGGCTGAGATCAGCCACTTCTCCC  
CGATAACGGAGACCGGCACACTGGCCATATCGGTGGTCATCATGCCAGCTTCATCCCCGATATGCAC  
CACCGGGTAAGTTACGGGAGACTTTACTGACAGCAGACGTGCACTGCCAGGGGATCACCATCCGT  
CGCCCCGGCGTCAATAATACTCTGTACATCCACAAACAGACGATAACGGCTCTCTTTATAGG  
TGTAACCTTAAACTGCATTTCACCAGCCTGTTCTGAGATTTCCGCTTCCAGCCTCGGACAGACGGGCTTCATT  
CTGCATGGTGTGCTTACCAAGACGGAGATATTGACATCATATGCTTGGCAACTGATAGCTGTCG  
TGTCAACTGTCAGTGTAAATACGCTGTTCATAGCACACCTCTTTGACATACTCAGGTTACATATCA  
GTATATATTCTTACCGCAAAATCAGCGCAGAACATACGCTACTGTTATCTGGCTTTAGTAAGCCGG  
ATCCACGCGATTACGCCCGCCCTGCCACTCATCGCAGTACTGTTGTAATTCAAGCATTGCGCAG  
ATGGAAGCCATCACAGACGGCATGATGAACCTGAATGCCAGGGCATCAGCACCTGCGCTTGC  
TAATATTGCCCATGGTAAAACGGGGCGAAGAAGTTGTCATATTGGCACGTTAAACTCAAACACTGG  
TGAAACTCACCCAGGGATTGGCTGAGACGAAAACATATTCTCAATAAACCTTTAGGGAAATAGGCCAG  
GTTTCAACCGTAACACGCCACATCTTGCAGATATGTTGAGAAACTGCCGGAAATCGTCGTGGTATTCA  
CTCCAGAGCGATGAAAACGTTCAAGTTGTCATGGAAAACGGTGTAAACAAGGGTGAACACTATCCCATA  
TCACCACTGCTACCGCTTTCATGCCATACGGAATTCCGGATGAGCATTCATCAGGCCAGGAAGAATGTG  
AATAAAGGCCGGATAAAACTTGTGTTATTTCATTACGGTCTTTAAAAGGCCGTAAATATCCAGCTGA  
ACGGTCTGGTTATAGGTACATTGAGCAACTGACTGAAATGCCCTAAATGTTCTTACGATGCCATTGGG  
ATATATCAACGGTGGTATATCCAGTGTATTTCCTTCCATTGTTAGCTCCCTAGCTCCTGAAAATCTGA  
TAACTCAAACCGCCGTAGTGTATCTTATTTCATTGTTGAAAGTGGAAACCTCTTACGTGCG  
TCAACGTCTCATTTGCCAAAAGTTGCCAGGGCTCCGGTATCAACAGGGACACCAGGATTATT  
ATTCTGCGAAGTGTACCTTCCGTACAGGTATTTCGGCGAAAGTGCCTGGGTGATGCTGCCAACTT  
AGTCGACTACAGGTCACTAACCATCTAAGTAGTTGATTCAAGTGACTGGATATGTTGTGTTTACAG  
TATTATGTTAGTCTGTTTTATGCAAAACTAATTAAATATATTGATATTATACATTACGTTTCTC  
GTTCAGCTTCTTGTACAAAGTGGTTGATCTAGAGGCCCGCCGGCTAGCAAAGGAGAAGAACTTTTCAC  
TGGAGTTGCCAATTCTGTTGAATTAGATGGTGTGTTAATGGCACAAATTCTGTCAGTGGAGAG  
GGTGAAGGTGATGCTACATACGGAAGCTTACCCCTAAATTATTGCACTACTGGAAAACACTGTT  
CATGGCCAACACTTGTCACTACTTCTCTTATGGTGTCAATGCTTTCCGTTATCCGGATCATATGAA  
ACGGCATGACTTTCAAGAGTGCCTGCCGAAGGGTATGTACAGGAACGCACTATATCTTCAAAGAT  
GACGGGAACATACAAGAACGCGTGTGAAGTCAAGTTGAAGGTGATACCTGTTAATCGTATCGAGTTAA  
AAGGTATTGATTAAAGAAGATGGAAACATTCTCGGACACAAACTCGAGTACAACACTCACACAA

Table 29 (continued) Nucleotide sequence of plasmid pcDNA™6.2/GFP-DEST  
(SEQ ID NO: 113).

TGTATACATCACGGCAGACAAACAAAAGAATGGAATCAAAGCTAACCTCAAAATTGTCACAACATTGAA  
GATGGATCGTCAACTAGCAGACCATTATCAACAAAATCTCCAATTGGCGATGCCCTGTCCTTTAC  
CAGACAAACCATTACCTGTCGACACAATCTGCCCTTCGAAAGATCCAACGAAAAGCGTGACCACATGGT  
CCTTCTTGAGTTGTAACTGCTGCTGGGATTACACATGGCATGGATGAATAGTAATGAGTCCACGTTAA  
ACGGGGGAGGCTAAGTAAACACGGAGGACAATACCGAAGGAACCCCGCTATGACGGCAATAAAA  
AGACAGAATAAAACGCACGGGTGTTGGGTCGTTGTTCATAAACCGGGGTTGGTCCAGGGCTGGCAC  
TCGTGCGATACCCCACCGAGACCCATTGGGCAATACGCCCGTTCTCCTTCCCCACCCACC  
CCCCAAGTTCGGGTGAAGGCCAGGGCTCGCAGCAACGTCGGGCGGAGGCCCTGCCATAGCAGATCT  
GCGCAGCTGGGCTCTAGGGGTATCCCCACGCGCCCTGTAGCGCGCATTAAGCGCGGGGTGTTG  
GTTACCGCAGCGTACACTTGCCAGCGCCCTAGCGCCGCTCCTTCGCTTCTCCCT  
TTCTCGCCACGTTGCGGGTTCCCCGTCAGCTCTAAATCGGGCATCCCTTAGGGTCCGATTAG  
TGCTTACGGCACCTCGACCCAAAAACTGATTAGGGTATGGTCAGTAGGGCCATGCCCTGA  
TAGACGGTTTTCGCCCTTGACGTTGGAGTCCACGTTAAATAGTGGACTCTTGGTCAAACGGAA  
CAACACTCAACCTATCTGGTCTATTCTTGATTATAAGGGATTTGGGATTCGGCCTATTGGTT  
AAAAAAATGAGCTGATTAAACAAAATTAAACGCGAATTAACTGTGGAATGTGTGTCAGTTAGGGTGTG  
GAAAGTCCCCAGGCTCCCGAGCAGGAGAATGCAAAGCATGCAATTAGTCAGCAACCAGGTG  
TGAAAAGTCCCCAGGCTCCCGAGCAGGAGAATGCAAAGCATGCAATTAGTCAGCAACCATA  
GTCGGCCCTAACTCCGCCATCCGCCCTAACCGCCAGTCCGCCATTCTCCGCCATGGCT  
GACTAATTTTTTATTATGCAAGAGGCCAGGGCGCTTGCGCTGAGCTATTCCAGAAGTAGTGAGG  
AGGTTTTTGGAGGCCTAGGTTGCAAAAGCTCCGGGAGCTTGATATCCATTTCGGATCTGAT  
CAGCACGTGTTGACAATTATCATGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAAC  
AACCATGGCCAAGCCTTGTCTAAGAAGAATCCACCCATTGAAAGAGCAACGGCTACAATCAACAGC  
ATCCCCATCTGAAGACTACAGCGTCGCCAGCGCAGCTCTCTAGCGACGGCGCATCTCACTGGT  
TCAATGTATATCATTTACTGGGGACCTTGTGCAAGACTCGTGGTGTGGGACTGCTGCTGCGC  
AGCTGGCAACCTGACTGTATCGCGATCGGAAATGAGAACAGGGCATCTTGAGCCCTGCGGACGG  
TGGCGACAGGTGCTCTCGATCTGCATCTGGGATCAAAGCCATAGTGAAGGACAGTGTGACAGCGA  
CGGCAGTTGGGATTCGTGAATTGCTGCCCTGGTTATGTGTTGGGAGGGCTAAGCACTCGTGGCGAGG  
AGCAGGACTGACACGTGCTACGAGATTGCACTCCACCGCCCTCTATGAAAGGTTGGCTCGGAAT  
CGTTTCCGGACGCCGGCTGGATGATCCTCCAGCGGGGATCTCATGCTGGAGTTCTCGCCACCC  
AACTGTTATTGCAAGCTTATAATGGTACAAATAAGCAATAGCATACAAATTTCACAAATAAGCAT  
TTTTTCACTGCATTCTAGTTGTTGTCACATCAATGTATCTTATCATGCTGTATACCGTC  
GACCTCTAGCTAGAGCTGGCGTAATCATGGCATAGCTGTTCTGTGAAATTGTTATCCGCTCACA  
ATTCCACACAACATACGAGCCGAAGCATAAAAGTGTAAAGCCTGGGTGCTTAATGAGTGAGCTAACTCA  
CATTAATTGCGTTGCGCTCACTGCCGCTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAAT  
CGGCCAACCGCGGGGAGAGGCCAGGGTTGCGTATTGGCGCTTCCCGCTCGCTACTGACTCGTG  
CGCTCGGTGTTGGCGAGCGGTATCAGCTACTCAAAGCGGTAAACGGTTATCCACAGAAT  
CAGGGATAACCGAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAGGCCG  
GTTGCTGGGTTTCCATAGGCTCGCCCCCTGACGAGCATACAAAATGACGCTCAAGTCAGAGG  
TGGCGAAACCGACAGGACTATAAAGATACCAAGGCCAGGGTTGCGTATTGGCGCTTCCCTCGTGCCTCTCG  
TTCCGACCTGCGCTTACGGGATACCTGTCGCCCTTCTCCCTGGGAAGCGTGGGCTTCTCATAG  
CTCACGCTGTAGGTATCTCAGTCGGTGTAGGTCGTTGCTCCAAGCTGGCTGTGTCACGAACCC  
GTTCAAGCCGACCGCTGCGCTTATCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTAT  
CGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGGTATGAGGCGGTGCTACAGAGTT  
GAAGTGGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTGGTATCTGCGCTGCTGAAGCCAGTT  
ACCTCGGAAAAGAGTTGGTAGCTCTTGATCGGCAAACAAACCAACCGCTGGTAGGGTTTTGTT  
GCAAGCAGCAGATTACGCGCAGAAAAAGGATCTCAAGAAGATCCTTGATCTTCTACGGGGTCTGA  
CGCTCAGTGGAACGAAAATCTACGTTAACGGATTGGTATGAGATTATCAAAGGATCTCACCTAG  
ATCCTTTAAATTAAAAATGAAGTTAAATCAATCTAAAGTATATGAGTAAACTGGTCTGACAGTT  
ACCAATGCTTAATCAGTGAGGACCTATCTCAGCGATCTGTCTATTGCTCATCCATAGTGCTGACT  
CCCCGTGTTAGATAACTACGATAACGGGAGGGCTTACCATCTGCCCTGGCCAGTGTGCAATGATACCGCGA  
GACCCACGCTCACCGGCTCCAGATTATCAGCAATAACCAAGCCAGGCCAGGGAGCGCAGAAGTG  
GTCCTGCAACTTATCCGCTCATCCAGTCTATTAAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTGCC  
AGTTAATAGTTGCGCAACGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTGTGGTATG

Table 29 (continued) Nucleotide sequence of plasmid pcDNATM6.2/GFP-DEST  
(SEQ ID NO: 113).

GCTTCATTCAGCTCCGGTCCCCAACGATCAAGGCAGTTACATGATCCCCATGTTGTGAAAAAGCGG  
TTAGCTCCTCGGTCTCCGATCGTTGTCAAAGTAAGTTGGCGCAGTGTATCACTCATGGTTATGGC  
AGCACTGCATAATTCTCTTACTGTCTGCCATCCGTAAGATGCTTTCTGTGACTGGTGAGTACTCAACC  
AAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTGCCCGCGTCAATACGGGATAATACCG  
CGCCACATAGCAGAACCTTAAAAGTGCTCATCATTGAAAACGTTCTCGGGCGAAACACTCTCAAGGAT  
CTTACCGCTGTTGAGATCCAGTTGATGTAACCCACTCGTCACCCAACGTGATCTTCAGCATCTTTACT  
TTCACCAGCGTTCTGGGTGAGCAAAACAGGAAGGCAAAATGCCGAAAAAAGGGATAAGGGCGACAC  
GGAAATGTTGAATACTCATACTCTCCTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCAT  
GAGCGGATACATATTGAATGTATTTAGAAAAATAACAAATAGGGGTTCCGCGCACATTCCCCGAAAA  
GTGCCACCTGACGTC

Please amend Table 30 on page 454 as follows:

Table 30: Amino acid sequence of a polypeptide having  $\beta$ -lactamase activity (SEQ ID NO: 114).

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Met Gly His Pro Glu Thr Leu Val Lys Val Lys Asp Ala Glu Asp Gln
   1           5           10          15
Leu Gly Ala Arg Val Gly Tyr Ile Glu Leu Asp Leu Asn Ser Gly Lys
   20          25          30
Ile Leu Glu Ser Phe Arg Pro Glu Glu Arg Phe Pro Met Met Ser Thr
   35          40          45
Phe Lys Val Leu Leu Cys Gly Ala Val Leu Ser Arg Asp Asp Ala Gly
   50          55          60
Gln Glu Gln Leu Gly Arg Arg Ile His Tyr Ser Gln Asn Asp Leu Val
   65          70          75          80
Glu Tyr Ser Pro Val Thr Glu Lys His Leu Thr Asp Gly Met Thr Val
   85          90          95
Arg Glu Leu Cys Ser Ala Ala Ile Thr Met Ser Asp Asn Thr Ala Ala
  100         105         110
Asn Leu Leu Leu Thr Thr Ile Gly Gly Pro Lys Glu Leu Thr Ala Phe
  115         120         125
Leu His Asn Met Gly Asp His Val Thr Arg Leu Asp His Trp Glu Pro
  130         135         140
Glu Leu Asn Glu Ala Ile Pro Asn Asp Glu Arg Asp Thr Thr Met Pro
  145         150         155         160
Val Ala Met Ala Thr Thr Leu Arg Lys Leu Leu Thr Gly Glu Leu Leu
  165         170         175
Thr Leu Ala Ser Arg Gln Gln Leu Ile Asp Trp Met Glu Ala Asp Lys
  180         185         190
Val Ala Gly Pro Leu Leu Arg Ser Ala Leu Pro Ala Gly Trp Phe Ile
  195         200         205
Ala Asp Lys Ser Gly Ala Gly Glu Arg Gly Ser Arg Gly Ile Ile Ala
  210         215         220
Ala Leu Gly Pro Asp Gly Lys Pro Ser Arg Ile Val Val Ile Tyr Thr
  225         230         235         240
Thr Gly Ser Gln Ala Thr Met Asp Glu Arg Asn Arg Gln Ile Ala Glu
  245         250         255
Ile Gly Ala Ser Leu Ile Lys His Trp
  260         265

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Please amend Table 31 on pages 455 and 456 as follows:

**Table 31: Nucleotide sequence of pLenti4TO/V5-DEST (SEQ ID NO: 115).**

aatgttagtcttatgcataactcttgttagtcgttgcacatggtaacgatgagttacaacatgccttacaaggagaga  
aaaagcaccgtgcatgccgattgggaaagtaagggttgcacatgcgtgccttatttaggaaggcaacagacgggtctg  
acatggattggacaaccactgaattgccgcattgcagagatattgtttaagtgccttagctcgatcacataaacgg  
gtctctggtagaccagatctgagcctggagctctggctaacttaggaaaccactgcttaagccctcaataaaa  
gcttgcttgcgttgcctcaagtagtgcgtgcctgtttgtgactctggtaactagagatccctcagaccctt  
tagtcagtgtggaaaatctctagcgtggcgcacggcaacaggacttgcggaaagcggaaaggaaaccagaggagctct  
cgacgcaggactcggcttgcgaagcgcacggcaagaggcgagggcgactggtagtgcgtccaaaatttt  
gactagcggaggctagaaggagagatgggtgcagagcgtcagttaaagcggggagaattagatcgcgtatgg  
aaaaaaattcggtaaggccagggaaagaaaaaatataaattaaacatatagtatggcaagcaggagctagaa  
cgattcgcagttaatcctggccttgcgttagaaacatcagaaggctgttagacaatactggacagctacaaccatcc  
tcagacaggatcagaagaacttagatcattataatacagtagcaaccctctattgtgtgcataaaggatagaga  
taaaagacaccaaggaagcttagacaagatagaggaagagcaaaaactaagaccaccgcacagcaagcggcc  
gctgatcttcagacctggaggagatgaggacaattggagaatgtgattataaataaataaagtagaaaaaa  
ttgaaccattaggagtagcaccaccaaggcaaaagagaagatggtagcagagagaaaaagagcagtggaaatagga  
gcttgccttgcgttgcgttagcagcactatggcgcagcgtcaatgacgctgacggtagcaggccag  
acaattattgtctggtagtgcagcagcagaacaattgtctggctattgaggcgaacagcatgttgcac  
tcacagtctggccatcaagcagctcaggcaagaatctggctgtggaaagatacctaaggatcaacagctctg  
gggatttgggttgcgtggaaaactcattgcaccactgtgtgccttgcgttagtgcgttagtgcgttagtgc  
ggaacagatttgcatacagcactggatggtagcagcactatggcgcagcgtcaatgacgctgacggtagcaggcc  
taattgaagaatcgcaccaaccagcaagaaaaaaagatgaacaagaattattggaaattagataatggcaagtttgc  
aattgggtaacataacaaattggctgtgtatataaattattcataatgatagtaggaggcttgcgttagttaag  
aatagttttgcgtactttctatagtgaatagatgttaggcaggatattcaccattatgcgttagcaccatcc  
caaccccgaggggaccgcacaggcccgaaggatagaagaagaaggtaggagagagacagacatccattcga  
ttagtgaacggatctgcacggtatcgcataagctggagttccgcgtacataactacgtaatggccgccttgc  
ctgaccgcacacgaccccccattgcgtcaataatgcgtatgtcccatgacgcataataggactttcc  
attgcgtcaatgggtggagttacgttaactgcgttgcacttgcgttagcgtacatcaagtgtatcatatgc  
ccccctattgcgtcaatgcacggtaatggccgcctggcattatgcgttagcgtacatgcacccatggacttt  
ttggcagtacatctacgtattgtcgttacatgcgttagtgcgttagcgtacatcaatggcgtgat  
agcgggttgcactacgggatttcaagtctccacccattgcgtcaatgggatgtttggcaccaaaatcaa  
cgggactttcaaaatgtcgtaacaactccgcattgcgtcaatggcggtaggcgttagcgttgc  
tataagcagagctccctatcgtgatagagatctccctatcgtgatagagatcgtcgtactgtcc  
gaattctgcagatataacaagttgtacaaaaaaagctgaacgagaacgtaaatgatataatataatatta  
aattagattttgcataaaaaacagactacataactgtaaaacacaacatattccagtcaactatggccgc  
ggcacccccaggcttacactttatgcctccggctgtataatgtgtggattttgcgttagtgc  
aggagctaaggaagctaaaatggagaaaaaaatcactggatataccaccgttgcataatcc  
aacatttgaggcatttcagtcagttgcatagttacccattccgcatttgcgttagtgc  
aagaccgtaaagaaaaataaagcacaagtttgcgttgcatttgcgttagtgc  
ggaaattccgtatggcaatggagacggtagctgttagtgcataatgggatgttt  
agcgttgcgttagtgcgttagtgcgttagtgcgttagtgcgttagtgc  
gatgtggcgtgttgcgttagtgcgttagtgcgttagtgcgttagtgc  
tccctgggttagttcaccagtttgcgttagtgcgttagtgcgttagtgc  
gcaaatattatacgcaggcacaagggtgttagtgcgttagtgcgttagtgc  
catgtcggtcgttagtgcgttagtgcgttagtgcgttagtgc  
cttactaaaagccagataacagttgcgttagtgcgttagtgcgttagtgc  
cccgaagtatgtcaaaaagagggtgttagtgcgttagtgcgttagtgc  
tcaaggcatatgttagtgcataatctccgtctggtagcacaaccat  
aacgcgtggaaagcggaaaatcaggaaggatggctgaggtcgcc  
gagaacaggactggtagtgcgttagtgcgttagtgcgttagtgc  
tacagagttagtgcgttagtgcgttagtgcgttagtgcgttagtgc  
gtctcccgtagactttaccgggtgtgcataatggggat  
gccaactgcgttagtgcgttagtgcgttagtgcgttagtgc  
gccaactgcgttagtgcgttagtgcgttagtgcgttagtgc

Table 31 (continued) Nucleotide sequence of pLenti4TO/V5-DEST SEQ ID NO: 115.

tgttctgggaatataatgtcaggctccgttatacacagccagtctgcaggtcgaccatagtgactggatatgttg  
tgtttacagtattatgttagtctgttttatgcaaaatctaatttaatatattgatatttatcatttacgttt  
ctcgttcagttctgtacaaagtgggtgatattccacagcacagtgccggccgctcgagtcagggccgcggttc  
gaaggtaaggctatccctaaccctctcctcggtctcgatttacgcgtaccggttagtaatgagtttggaaattaatt  
ctgtggaatgtgtgtcagttagggtgtggaaagtccccaggctcccaggcaggcagaagtgatgaaagcatgcac  
tcaattagtcaaccagggtgtggaaagtccccaggc  
tcccccagcaggcagaagtgatgcaaccatgcattactcaattactcagcaaccatagtccgccccctaactccgccccat  
cccgccccctaactccgccccagttccgccccattctccgccccatggctgactaatttttatttatgcagaggccg  
agccgcctctgcctctgagctattccagaagtagttagggaggctttttggaggcctaggctttgcaaaaagctc  
ccccctgttgcacaattaatcatcgcatagtatatcgcatagttataatcacaaggtaggaaactaaaccatggcc  
aagttgaccagggtgccgttcccggtctaccgcgcgcacgtcggcggagcggcgtcgaggttctggaccgaccgcgtcc  
gttctcccgggacttcgtggaggacgacttcgcccgtgtggccggacgcgtgaccctgttcatcagcgcgggtcc  
agaccagggtggtgccggacaacaccctggcctgggtgtgggtgcgcggcctggacgcgtgtacgcccggatggctg  
gaggcgtgtccacgaactccgggacgcctccggccggcatgaccgagatcggcggcagcgcgtggggccggga  
gttcgcctctgcgcgaccggccggcaactgcgtgcacttcgtggccgaggagcaggactgacacgtgtacagatt  
taaatggtaccccttaagccaatgacttacaaggcagctgttagatcttagccactttttaaaagaaaaaggggggact  
ggaaggcataattcactcccaacgaagacaagatctgcttttgcctgactgggtctctggttagaccagatct  
gaccctgggagctctctggctaacttagggaaaccactgccttaagcctcaataaagctgccttgagtgcctcaagta  
gtgtgtgcccgtctgtgtgactctggtaacttagagatccctcagacccttttagtcagtgtggaaaatctctag  
cagtagtagttcatgtcatcttattattcagtattataacttgcacaaagaaatgaatatcagagactgagaggaact  
tgttattgcagttataatggtacaaataaagcaatagcatcacaatttcacttcgtctgctctgactatccgccccctaactccg  
ccatccgcggccactccgccccagttccgccccattctccgccccatggctgactaatttttatttatgcaga  
ggccgaggccgcctcgccctctgagctattccagaagtagttagggaggctttttggaggcctaggacgtacccaa  
ttcgccctatagtgagtcgttattacgcgcgtcaactggccgtcttttacaacgtcgtgactggaaaaccctggcg  
ttacccaacttaatcgcccttgccgacatcccccttcgcctggcgtatagcgaagaggccgcaccgatcgc  
ccttcccaacagttgcgcagcctgtaatggcgaatggacgcgcctgttagcggcgcattaagcgcggcgggtgtgt  
ggttacgcgcagcgtgaccgcgtacacttgcacgcgccttagcgcggcgtcttcgccttttcgccttcgc  
ccacgttgcggcgttcccgctcaagctctaaatcggggctccctttagggtccgatattagtcgttacggc  
ctcgaccccaaaaaacttgattagggtgatggtcacgttagtggccatgcctgatagacggttttcgcctt  
gacgttggagttccacgttcttaatagtggactcttgccttgcggaaacaacactcaaccctatctcggtctatt  
ctttgatttataagggatttgcgatttgcgcctattggtaaaaaatgagctgatattacaaaaatttaacgc  
aattttacaaaatattaaacgcattacaatttaggtggcacttttcggggaaatgtgcgcggaaaccctattgttta  
ttttctaaatacattcaatatgtatccgtcatgagacaataaccctgataaatgcttcaataatattgaaaaag  
gaagagtatgatgattcaacattccgtgtcccttattcccttttgcggcatttgccttcgttttgc  
acccagaaaacgcgtggaaagttaaagatgcgtgaaagatcagttgggtgcacgcgtgggttacatcgaactggatctc  
aacagcgtaagatcattgcggatgtttcgccccgaagaacgcgtttcaatgatgagcactttaaagtctgtatg  
tggcgcggattatccgtattgcgcggcaagagcaactcggcgcgcatacactattctcagaatgacttgg  
ttgagttactcaccagtcacagaaaaagcatcttacggatggcatgacagtaagagaattatgcgtgtgcataacc  
atgagtataacactgcggcaacttacttgcataacgcgtcgaggaccgaaaggagctaccgccttttcgcacaa  
catggggatcatgtactgccttgcgttgggaaaccggagctgatgaaagccataccaaacgcgcgtgaca  
ccacgtgcgttagcaatggcaacaacgcgtgcgcacactattacgcgtacttactctagttcccgca  
caattatagactggatggaggccgataaaagttgcaggaccattctgcgtcggcccttcggctggctggttat  
tgctgataaatctggagccgtgagcgtgggtctcggtatcattgcacgcactggggccagatggtaaaccctccc  
gtatcgtagttatctacacgcacggggagtgcggcaactatggatgaaacgaaatagacagatcgctgagataggtgc  
tcactgatataacttcgttactcatatataactttagatttttttttttttttttttttttttttttttttttttt  
attnaaaaggatcttaggtgaagatcattttgataatctcatgacccaaatcccttaacgtgagtttcgttccact  
gagcgtcagacccgtagaaaagatcaaaaggatcttgcggatcctttttctgcgttaatctgtgttttgc  
acaaaaaaaaaccaccgcgtaccagcggtgggtttttgcggatcaagagctaccacttttccgaaggtaactgg  
cttcagcagcgcagataccaaacttgcgttcttgcgttagccgttagttaggcaccacttcaagaactctgttag  
caccgcctacataccgcgtctgcataatctgttaccaggcgtggctgcgtccaggcgtggcataagtgcgttaccgg  
ttggactcaagacgatagttaccggataaggcgcagcggtcggtgaacgggggggtcgtgcacacagccagctt  
ggagcgaacgacacctacaccgaactgagataccgcgttagcgttagttaggcaccacttcaagaactctgttag  
aggcggacaggatccggtaagcggcagggtcggaacaggagagcgcacgcaggagcgttccaggggaaacgcctgg  
tatctttatagtcgtcggtttcgccacctctgacttgagcgtcgatttttgtatgctgtcgatggggggcggag

Table 31 (continued) Nucleotide sequence of pLenti4TO/V5-DEST SEQ ID NO: 115.

cctatggaaaaacgccaggcaacgcggccttttacggttcctggcctttgctggcccttgcacatgttcttc  
ctgcgttatccccctgattctgtggataaccgtattaccgccttgagtgaagctgataccgctcgccgcagccgaacg  
accgagcgcagcgcgactcagttagcgaggaagcgccaatacgc当地accgcctctcccgcgcttggcc  
gattcattaatgcagctggcacgacagggttcccgactggaaagcgcccactgagcgc当地accgc当地atgtgagtt  
agctcaactcattaggcacccaggcttacactttatgcttcccgctcgatgttggaaattgtgagcggataa  
caatttcacacaggaacagctatgaccatgattacgc当地accgc当地ataccctcactaaaggaaacaaaagct  
ggagctgcaagctt

Please amend Table 32 on pages 457 and 458 as follows:

Table 32: Nucleotide sequence of pLenti6/TR (SEQ ID NO: 116).

Table 32 (continued) Nucleotide sequence of pLenti6/TR (SEQ ID NO: 116).

Table 32 (continued) Nucleotide sequence of pLenti6/TR (SEQ ID NO: 116).

agctggcacgacaggttcccactggaaagcgggcagtgagcgcaacgcaattaatgtgagtttagctactcatta  
ggcaccccaaggcttacacttatgcttcggctcgatgttgtggattgtgagcggataacaattcacacag  
gaaacagctatgaccatgattacgccaagcgcgcaattaacctcaactaaagggaacaaaagctggagctgcaagct  
t

Please amend Table 33 on pages 459 and 460 as follows:

Table 33: Nucleotide sequence of pLenti6/V5 (SEQ ID NO: 117).

Table 33 (continued) Nucleotide sequence of pLenti6/V5 (SEQ ID NO: 117).

Please amend Table 34 on pages 461 and 462 as follows:

Table 34: Nucleotide sequence of pLenti3/V5-TREx (SEQ ID NO: 118).

aatgttagtcttatgcaataactctttagtcttgcacatggtaacgatgagtttagcaacatgccttacaaggagaga  
aaaaggcaccgtgcatgccgattggtaagtggtacgtgccttatttaggaaggcaacagacgggtctg  
acatggattggacgaaccactgaattgcccattgcagagatattgtatttaagtgcctagctcgatacataaacgg  
gtctctctggtagaccagatctgagccctggagactctctggctaacttagggaaaccactgcttaagcctcaataaa  
gcttcctttagtgcctcaagttagtgtgtccgtctgtgtgactctgttaactagagatccctcagaccctt  
tagtcagtgtggaaatctctagcagtggccccgaacagggacttggaaagcgaaaggaaaccagaggagctct  
cgacgcaggactcggcttgcgaagcgcgcacggcaagaggcgagggcgactggtagtacgccaaaaatttt  
gactagcggaggctagaaggagagatgggtgcgagagcgtcagtattaagcggggagaatttagatcgcgatgg  
aaaaaaattcggtaaggccagggggaaagaaaaaaatataaattaaacataatagtagtggcaagcaggagctagaa  
cgattcgcagttaatcctggcctttagaaacatcagaaggcttagacaaaatactgggacagctacaaccatccct  
tcagacaggatcagaagaacttagatcattatataatcagtagcaacccttatttgtgtcatcaaaggatagaga  
taaaagacaccaaggaagctttagacaagatagaggaagagcaaaacaaaagtaagaccaccgcacagcaagcggcc  
gctgatcttcagacctggaggagatattgagggacaattggagaagtgaattatataataaaatgttagaaaaaa  
ttgaaccattaggatgtagcaccaccaccaaggcaagagaagactggtagcagagagaaaaagagcagtggaaatagga  
gcttggccttgggttctggagcagcaggactatggcgcagcgtcaatgacgctgacggtagcaggcc  
acaattattgtctggtatagtgcagcagcagaacaatttgcgtgaggctattgaggcgcaacagcatctttcaac  
tcacagtctggggcatcaagcagctccaggcaagaatcctggctggaaagataccctaaaggatcaacagctcctg  
gggatttgggttgctctggaaaactcattgcaccactgctgccttggaaatgcttagttggagtaataatctct  
ggAACAGATTGGAATCACACGACCTGGATGGAGTGGACAGAGAAATTACACAGCTTAATACACTCCT  
taattgaagaatcgcaaaaccaggcaagaaaaaaatgaacaagaattatttggaaattagataatggcaagttgtgg  
aattgggttaacataacaaattggctgtgttatataaattattcataatgatagttaggaggcttggtaggttaag  
aatagttttgtctgtactttctatagtgaatagagttaggcaggatattcaccattatcggtttagaccacccacctcc  
caaccccgggggaccgcacaggcccgaaggaatagaagaagggtggagagagacagagacagatccattcga  
ttagtgaacggatctcgacggtatcgataagcttggagttccgcgttacataacttacgtaatggccgcctgg  
ctgaccgcacacgaccccccattgcgtcaataatgacgtatgttcccatagtaacgcacatggactttcc  
attgacgtcaatgggtggagtattacggtaaactcccccattgcgtacatcaagtgtatcatatgcacatgc  
ccccctattacgtcaatgcggtaatggccgcctggcattatgcggcattacatgaccttatggactttctac  
ttggcagtacatctacgtattagtcatcgattaccatggatgcgtttttggcagtacatcaatggcgtggat  
acgggtttgactcacgggatttccaagtctccacccattgcgtcaatggagttttggcaccaaaaatcaa  
cgggactttccaaaatgtcgtaacaactcccccattgcacaaatggcggttaggcgttacgggtggaggtcta  
tataaggcagactctccatatcgtatgatagatctccatcgtatgatagatgcgtcagcggactcgatgt  
accgtcagatcgccctggagacgcgcattccacgcgttttgcacccatagaagacacccggaccgcacgcctccgg  
actctagaggatccctaccggtgatattcctcgagtcttagaggcccgcgttgcacggtaacgcctatccctaaaccct  
ctccctcggtctcgatttacgcgtaccggtagtaatgatgtttggaaatttctgtggaaatgtgtcagtttaggg  
tgtggaaaagtccccaggctccccaggcaggcagaaggatgcacaaagcatctcaattagtcaaccaaccagggt  
gaaagtccccaggctccccaggcaggcagaaggatgcacaaagcatctcaattagtcaaccaaccatagtccggccc  
ctaactccggccatcccgccccataactccggccatgtccggccattctccggccatggctgactaattttttat  
ttatgcagaggccgaggccctctgcctctgagctattccagaatgttagtggaggctttttggaggcctaggct  
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tatgactgggcacaacagacaatcggtctgtatgcgcggctgtccggctgtcagcgcaggggccgggttct  
tttggtagatggcacaacagacaatcggtctgtatgcgcggctgtccggctgtcagcgcaggggactggcttgc  
ggcaggatctccgtcatctcacctgcgtccggagaaaggatccatcatggctgtatgcacatgcggccggctgc  
tacgcttgcgtccggctacctgcgtccggatcgaccaccaaggcggaaacatcgcatcgacgcggactcgatgg  
ccggcttgcgtccggatcgaccaccaaggcggatcgaccaccaaggcggactcgatggcttgcgtccggatcg  
ggcgcgttgcgtccggatcgaccaccaaggcggatcgaccaccaaggcggactcgatggcttgcgtccggatcg  
atattgtgttagatggcacaacagacaatcggtctgtccggctgtccggatcgaccaccaaggcggactcgatgg  
ccggcttgcgtccggatcgaccaccaaggcggatcgaccaccaaggcggactcgatggcttgcgtccggatcg  
ccggatcgaccaccaaggcggatcgaccaccaaggcggactcgatggcttgcgtccggatcgaccaccaaggc  
cccaacctgcacacgatggtaactggtagctttaagaccatgacttacaaggcagctgttagatcttagccact

Table 34 (continued) Nucleotide sequence of pLenti3/V5-TREx (SEQ ID NO: 118).

Please amend Table 35 on page 463 as follows:

Table 35: Nucleotide sequence of a nucleic acid fragment containing the tetracycline repressor coding sequence (SEQ ID NO: 119).

```
agcttggtacccggggatcctctagggcctctgagctattccagaagtagtgaagaggcttttgaggcctaggc  
tttgcaaaaagctccggatcgatcctgagaacttcagggtgagttggggacccttgattgtctttcttttcgc  
tattgtaaaattcatgttatatatggagggggcaaagtttcagggtgtttagaatttggaaagatgtccctgtatc  
accatggaccctcatgataattttgttcttacttctactctgtgacaaccattgtctcttattttctt  
tcattttctgttaactttcgttaaacttagcttgcatttgcataacgaattttaaatttactttgttatttgc  
agattgtaaagtactttcttaatcactttttcaaggcaatcagggtatattatattgtacttcagcacagttt  
agagaacaattgttataattaaatgataaggtagaatatttgcataataattctggctggcgtggaaatatttt  
attggtagaaaacaactacatcctggcatcatcctgccttctctttatggttacaatgatataactgtttgagat  
gaggataaaactctgagttccaaaccggccctctgctaaccatgttcatgccttcttcttccacagctcc  
tgggcaacgtgctggattgtgtctcatcatttggcaaagaattgttaatacgaactcactatagggcgaattt  
atatgtcttagattgataaaagtaaatgatataacagcgcattagagctgttaatgaggtcggaaatcgaaggttt  
acaacccgtaaactcgcccagaagctaggtagagcagcctacattgttattggcatgtaaaaataagcggcctt  
gctcgcgccttagccatttagataggcaccataactcactttgcctttagaaggggaaagctggcaag  
atttttacgtataacgctaaaagttttagatgtgtttactaagtcatcgcatggagcaaaagtacatttagt  
acacggcctacagaaaaacagtatgaaactctcgaaaatcaatttagcctttatgccaacaaggtttactaga  
aatgcattatatgcactcagcgtgtgggcattttacttaggttgcgtattggaaagatcaagagcatcaagtgc  
ctaaagaagaaagggaaacacactactactgtatgatgtatgccgcattattacgacaagctatcgaattattgtatcac  
caagggtgcagagccagcgttattcggccttgaattgtatcatatgcggattagaaaaacaacttaatgtgaaag  
tgggtccgcgtacagcggatccggaaattctagagggccgcggttcgaacaaaaactcatctcagaagaggatct  
gaatatgcata
```

Please amend Table 36 on pages 464 and 465 as follows:

Table 36: Nucleotide sequence of pRRL6/V5 also referred to as pLenti6/V5 (SEQ ID NO: 120).

1 aatgtagtc tatgcaatac tctttagtgc ttgcaacatg gtaacgatga gtttagcaaca  
61 tgccctacaa ggagagaaaa agcaccgtgc atgccgattt gtggagatgg ggtggatcg  
121 tcgtgcctta ttaggaaggc aacagacggg tctgacatgg attggacgaa ccactgaatt  
181 gccgcattgc agagataattt tatttaagtgc cctagctcgat tacaataaac gggctctct  
241 ggttagacca gatctgagcc tggagactct ctggctaact agggaaacca ctgcttaagc  
301 ctcaataaaag ctgccttgc gtgcttcaag tagtgtgtgc ccgtctgttg tggactctg  
361 gtaacttagag atccctcaga cccttttagt cagtggtggaa aatctctagc agtggcgccc  
421 gaacagggac ctgaaagcga aaggaaacc agagctctc cgacgcagga ctggcttgc  
481 tgaagcgcgc acggcaagag gcggggggcg gcgactggg agtacgcca aaattttgac  
541 tagcggaggc tagaaggaga gagatgggtg cgagagcgatc agtattaagc gggggagaat  
601 tagatcgcga tggaaaaaaa ttcgggttaag gccagggggaa aagaaaaaat ataaattaaa  
661 acatatagtt tggcaagca gggagctaga acgatcgca gttatcttgc gcctgttaga  
721 aacatcagaa ggctgttagac aaataactggg acagctacaa ccatcccttc agacaggatc  
781 agaagaactt agatcattat ataatacagt agcaaccctc tattgtgtgc atcaaaggat  
841 agagataaaa gacaccaagg aagctttaga caagatagag gaagagcaaa acaaaagtaa  
901 gaccaccgcg cagcaagcgg ccgtgtatc tcagacctgg aggaggagat atgagggaca  
961 attggagaag tgaatttat aatataaaat tagtaaaaat tgaaccatgg gtagtagcac  
1021 ccaccaaggc aaagagaaga gtgggtcaga gagaaaaaat agcagtggg ataggagtt  
1081 tgttccttgg gttcttggg gcagcaggaa gcactatggg cgccgcctca atgacgctga  
1141 cggtagcaggc cagacaatta ttgtctggta tagtgcagca gcagaacaat ttgtgaggg  
1201 ctattgaggc gcaacagcat ctgttgcac tcacagtctg gggcatcaag cagtcagg  
1261 caagaatcct ggctgtggaa agatacctaa aggatcaaca gtcctggg atttggggtt  
1321 gctctggaaa actcattgc accactgtgc tgccttggaa tgctagttgg agtaataaat  
1381 ctcttggaaa gattggatc acacgacctg gatggagtgg gacagagaaaa ttaacaattt  
1441 cacaagctt atacactcct taatttgaaga atcgaaaaac cagcaagaaaa agaatgaaca  
1501 agaattatttgg gaatttagata aatggggcaag tttgtggaaat tggtttaca taacaaatttgg  
1561 gctgtggat ataaaaattt tcataatgtat agtagggggc ttggtaggtt taagaatagt  
1621 ttttcttgc ttttctatag tgaatagat taggcaggaa tattcaccat tattgtttca  
1681 gaccacccctc ccaaccccgaa ggggaccccgaa caggccccgaa ggaatagaag aagaagggtgg  
1741 agagagagac agagacagat ccattcgatt agtgaacggc tctcgacggc atcgataagc  
1801 ttgggagttc cgcgttacat aacttacggg aatggcccg cctggctgac cgcccaacga  
1861 ccccccggccca ttgacgtcaa taatgacgtaa tggtccata gtaacgcca tagggactt  
1921 ccattgtacgt caatgggtgg agtatttacg gtaaaactgcc cacttggcag tacatcaagt  
1981 gtatcatatg ccaagtacgc cccctatttgc cgtcaatgac ggttaatggc ccgcctggca  
2041 ttatgtcccgat tacatgacccat tatgggactt tcctacttgg cagtagatct acgtatttgc  
2101 catcgctatt accatggtga tgcgtttttgc gtagtacatc aatggggcgtg gatagcgggtt  
2161 tgacttcacgg ggattttccaa gtctccaccat cattgacgtc aatggggagtt tggtttggca  
2221 cccaaatcaa cgggactttc caaaatgtcg taacaactcc gccccatttgc cgccaaatggg  
2281 cggtaggcgt gtacgggtgg aggtctatata aagcagagct cgttttagtgc accgtcagat  
2341 cgcctggaga cgccatccac gctgttttgc cttccataga agacaccggc tctagaggat  
2401 ccactagtcc agtgtgggtt aattctgcacg atatccagca cagtgccggc cgctcgagtc  
2461 tagagggccc gcggttcgaa ggttaacccat tccctaaatcc tctccctcggt ctcgattctt  
2521 cgcgttcccgat ttagtaatgc gtttggcttgc ctggccgtc tgccggcttgc tccgcgtt  
2581 cgccttcggcc ctcagacgag tcggatctcc ctttggcccg cttcccccggcc tgaaattat  
2641 tctgtggat gtgtgtcagt taggggtgtgg aaagtccca ggctcccccggcc gcaggcagaa  
2701 gtatgtcaag catgcatttc aatttagtgc aaccaggatc tggaaatgtcc ccaggctccc  
2761 cagcaggcag aagtatgcaaa agcatgcattc tcaatttagtgc agcaaccata gtcggcccc  
2821 taactccggcc catcccgccc ctaactccgc ccagttccgc ccattctccg ccccatggct  
2881 gactaattttttttt ttttattat gcagaggcccg aggccgcctc tgcctctgag ctattccaga  
2941 agtagtgagg aggctttttt ggaggccttag gcttttgc aaagctcccg ggagcttgc  
3001 tatccatattt cggatctgtat cagcacgtgt tgacaattaa tcatcgccat agtataatcg  
3061 catagtataa tacgacaagg tgaggaacta aaccatggcc aagccttgc ctcaagaaga

Table 36 (continued) Nucleotide sequence of pRRL6/V5 also referred to as pLenti6/V5  
(SEQ ID NO: 120).

3121 atccacccctc attgaaaagag caacggctac aatcaacagc atccccatct ctgaagacta  
3181 cagcgtcgcc agcgcaagtc tctctagcga cggccgcata ttcactgggt tcaatgtata  
3241 tcattttact gggggacctt gtgcagaact cgtggctgt ggcactgctg ctgctgcggc  
3301 agctggcaac ctgacttgta tcgtcgcat cgaaaatgag aacaggggca tcttgagccc  
3361 ctggggacgg tgccgacagg tgcttctcga tctgcacatct gggatcaaag ccatagtgaa  
3421 ggacagtgtatggacagccga cggcagttgg gattcgtgaa ttgctgcctt ctgggttatgt  
3481 gtggggggc taagcacaat tcgagctcggt taccttaag accaatgact tacaaggcag  
3541 ctgttagatct tagccacattt taaaaagaaaa agggggact ggaaggggcta attcaactccc  
3601 aacgaagaca agatctgctt tttgcttgta ctgggtctct ctgggttagac cagatctgag  
3661 cctggggagct ctctggctaa cttaggaaacc cactgcttaa gcctcaataa agcttcgcctt  
3721 gagtgcttca agtagtgtgt gcccgtctgt tttgtgactc tggtaacttag agatccctca  
3781 gaccctttta gtcagtgtgg aaaatctcta gcagtagtag ttcatgtcat cttattattc  
3841 agtattttata acttgcaaaag aaatgaatat cagaggtga gaggaacttg tttattgcag  
3901 cttataatgg ttacaaataa agcaatagca tcacaaattt cacaataaaa gcatttttt  
3961 cactgcattc tagttgtgtt ttgtccaaac tcatcaatgt atcttatcat gtctggctct  
4021 agctatcccg cccctaactc cgccccatgc cggccattct cggcccccatt gctgactaat  
4081 ttttttatt tatgcagagg ccgaggccgc ctggcctct gagctattcc agaagtagtg  
4141 aggaggctt tttggaggcc taggcttttgcgtcgagacg tacccaattt gccctatagt  
4201 gagtcgtatt acgcgcgctc actggccgctc gttttacaac gtcgtgactg gaaaaaccct  
4261 ggcgttaccc aacttaatcg ctttgcagca catccccctt tcgcccagctg gctgataatgc  
4321 gaagaggccc gcaccgatcg cccttcccaa cagttgcgcgc gcctgaatgg cgaatggcgc  
4381 gacgcgcctt gttagcggcgc attaagcgcgc gcgggtgtgg tggttacgcgc cagcgtgacc  
4441 gctacacttg ccagcgcctt agcgcggcgt ctttgcgtt tttcccttc ctttctcgcc  
4501 acgttcgcgg gtttcccccg tcaagctcta aatcgggggc tccctttagg gttccgattt  
4561 agtgccttac ggcacctcga ccccaaaaaa cttgatttagg gtatgggttc acgttagtggg  
4621 ccatcgccct gatagacggt ttttgcctt ttgacgttgg agtccacgtt ctttaatagt  
4681 ggactcttgc tccaaactgg aacaacactc aaccctatct cggcttattt ttttattt  
4741 taagggattt tgccgatttc ggcttattgg taaaaaaatg agctgattt acaaaaattt  
4801 aacgcgaatt ttaacaaaat attaacgttt acaatttccc aggtggact tttcggggaa  
4861 atgtgcgcgg aaccctatt ttttatttt tctaaataca ttcaaataatg tatccgctca  
4921 tgagacaata accctgataa atgcttcaat aatattgaaa aaggaagagt atgagtattt  
4981 aacatttcgg tgccgcctt attccctttt ttgcggcatt ttgccttctt gttttgcctc  
5041 acccagaaac gctgggtgaaa gtaaaagatg ctgaagatca gttgggtgca cgagtgggtt  
5101 acatcgaaact ggtatctcaac agcggtaaga tccttgcggat ttttgcctt gaaacgtt  
5161 ttccaaatgtat gggactttt aaagttctgc tatgtggcgc ggtattatcc cgtattgcgc  
5221 ccggcaaga gcaactcggt cggccgcatac actattctca gaatgactt gttgagttact  
5281 caccagtac agaaaagcat ttacggatg gcatgacagt aagagaattt tgcaatgcgt  
5341 ccataaccat gagtgataaac actgcggcaca acttacttct gacaacgatc ggaggaccga  
5401 aggagctaacc cgttttttgc cacaacatgg gggatcatgt aactcgccctt gatcggtgg  
5461 aaccggagct gaatgaagcc ataccaaacg acgagcgtga caccacgatc cctgtaccaa  
5521 tggcaacaaac gttgcgcaaa ctattaactg gcaactact tactcttagt tccccggcaac  
5581 aattaataga ctggatggag gggataaaag ttgcaggacc acttctgcgc tcggcccttc  
5641 cggctggctg gtttatttgc gataaatctg gagccggta ggcgtgggtct cgcgttatca  
5701 ttgcaggact gggggccagat ggtaaaggccct cccgtatctg agttatctac acgacgggg  
5761 gtcaggcaac tatggatgaa cgaaaatagac agatcgctga gataggtgcc tcactgatta  
5821 agcattggta actgtcagac caagtttact catataact ttagattgtt taaaacttc  
5881 attttaatt taaaaggatc taggtgaaga tccttttgc taatctcatg accaaaatcc  
5941 cttaacgtga gttttcggtt cactgagcgt cagacccgt agaaaagatc aaagatctt  
6001 cttgagatcc ttttttctg cgcgtatct gctgcttgc aaaaaaaaaa ccaccgctac  
6061 cagcgggtgtt ttgtttggccg gatcaagagc taccaactt ttttccgaa gtaactggct  
6121 tcagcagagc gcagatacca aatactgtcc ttcttagtgc gccgtatgtt ggcaccact  
6181 tcaagaactc tgtagcacccg cctacatacc tcgctctgt aatcctgtt ccagtggctg  
6241 ctgcgcgttgg cgataagtgc tgcttaccg ggttggactc aagacgatag ttaccggata  
6301 aggccgacgcg gtcgggtgtt acgggggggtt cgtgcacaca gcccagctt gagcgaacga

Table 36 (continued) Nucleotide sequence of pRRL6/V5 also referred to as pLenti6/V5  
(SEQ ID NO: 120).

```
6361 cctacaccga actgagatac ctacagcgta agctatgaga aagcgccacg cttcccgaag
6421 ggagaaaaggc ggacaggatc ccggtaagcg gcagggtcgg aacaggagag cgcacgaggg
6481 agcttccagg gggaaacgc tggtatctt atagtcctgt cgggttgc caccctgtac
6541 ttgagcgtcg atttttgtga tgctcgtca gggggcggag cctatggaaa aacgccagca
6601 acgcggcctt tttacggttc ctggcctttt gctggcctt tgctcacatg ttcttcctg
6661 cgttatcccc tgattctgtg gataaccgta ttaccgcctt tgagttagt gataccgctc
6721 gccgcagccg aacgaccgag cgcaagcgagt cagtgagcga ggaagcggaa gagcgcggaa
6781 tacgcaaacc gcctctcccc gcgcgttggc cgattcatta atgcagctgg cacgacaggt
6841 ttcccgactg gaaagcgggc agtgagcgc acgcaattaa tgtgagttag ctcactcatt
6901 aggacaccca ggctttacac ttatgcttc cggctcgat gttgtgtgga attgtgagcg
6961 gataacaatt tcacacagga aacagctatg accatgatta cgccaagcgc gcaatttaacc
7021 ctcactaaag ggaacaaaag ctggagctgc aagctt
```

At the end of the application, and before the drawings, please insert the sequence listing attached hereto.